

# UNIVERSITY OF MARYLAND

OFFICIAL PUBLICATION

---

Vol. 34

MARCH, 1937

No. 3

---

Catalogue Number

1937-1938



COLLEGE PARK, MARYLAND

# CALENDAR FOR 1937, 1938

1937

JULY

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1938

JANUARY

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MAY

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1939

JANUARY

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APRIL

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MAY

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28	29	30	31			

JUNE

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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

# THE UNIVERSITY of MARYLAND

## CATALOGUE NUMBER

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Announcements for the Scholastic Year 1937-1938  
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Facts, conditions, and personnel herein set forth are as  
existing at the time of publication, March, 1937.

Issued Monthly by The University of Maryland, College Park, Md.  
Entered as Second Class Matter Under Act of Congress of July 16, 1894.



# CALENDAR FOR 1937, 1938

1937	1938	1939
<b>JULY</b>	<b>JANUARY</b>	<b>JANUARY</b>
S M T W T F S	S M T W T F S	S M T W T F S
1 2 3	1	1 2 3 4 5 6 7
4 5 6 7 8 9 10	2 3 4 5 6 7 8	8 9 10 11 12 13 14
11 12 13 14 15 16 17	9 10 11 12 13 14 15	15 16 17 18 19 20 21
18 19 20 21 22 23 24	16 17 18 19 20 21 22	22 23 24 25 26 27 28
25 26 27 28 29 30 31	23 24 25 26 27 28 29	29 30 31
30 31	30 31	
<b>AUGUST</b>	<b>FEBRUARY</b>	<b>FEBRUARY</b>
S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7	1 2 3 4 5	1 2 3 4
8 9 10 11 12 13 14	6 7 8 9 10 11 12	5 6 7 8 9 10 11
15 16 17 18 19 20 21	13 14 15 16 17 18 19	12 13 14 15 16 17 18
22 23 24 25 26 27 28	20 21 22 23 24 25 26	19 20 21 22 23 24 25
29 30 31	27 28	26 27 28
<b>SEPTEMBER</b>	<b>MARCH</b>	<b>MARCH</b>
S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4	1 2 3 4 5	1 2 3 4
5 6 7 8 9 10 11	6 7 8 9 10 11 12	5 6 7 8 9 10 11
12 13 14 15 16 17 18	13 14 15 16 17 18 19	12 13 14 15 16 17 18
19 20 21 22 23 24 25	20 21 22 23 24 25 26	19 20 21 22 23 24 25
26 27 28 29 30	27 28 29 30 31	26 27 28 29 30 31
<b>OCTOBER</b>	<b>APRIL</b>	<b>APRIL</b>
S M T W T F S	S M T W T F S	S M T W T F S
1 2	1 2	1
3 4 5 6 7 8 9	3 4 5 6 7 8 9	2 3 4 5 6 7 8
10 11 12 13 14 15 16	10 11 12 13 14 15 16	9 10 11 12 13 14 15
17 18 19 20 21 22 23	17 18 19 20 21 22 23	16 17 18 19 20 21 22
24 25 26 27 28 29 30	24 25 26 27 28 29 30	23 24 25 26 27 28 29
31		30
<b>NOVEMBER</b>	<b>MAY</b>	<b>MAY</b>
S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6	1 2 3 4 5 6 7	1 2 3 4 5 6
7 8 9 10 11 12 13	8 9 10 11 12 13 14	7 8 9 10 11 12 13
14 15 16 17 18 19 20	15 16 17 18 19 20 21	14 15 16 17 18 19 20
21 22 23 24 25 26 27	22 23 24 25 26 27 28	21 22 23 24 25 26 27
28 29 30	29 30 31	28 29 30 31
<b>DECEMBER</b>	<b>JUNE</b>	<b>JUNE</b>
S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4	1 2 3 4	1 2 3
5 6 7 8 9 10 11	5 6 7 8 9 10 11	4 5 6 7 8 9 10
12 13 14 15 16 17 18	12 13 14 15 16 17 18	11 12 13 14 15 16 17
19 20 21 22 23 24 25	19 20 21 22 23 24 25	18 19 20 21 22 23 24
26 27 28 29 30 31	26 27 28 29 30	25 26 27 28 29 30

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# UNIVERSITY CALENDAR

1937-1938

## COLLEGE PARK

### First Semester

1937		
Sept. 16-17	Thursday-Friday	Registration for freshmen.
Sept. 18	Saturday	Upper classmen complete registration.
Sept. 20	Monday, 8:20 a. m.	Instruction for first semester begins.
Sept. 25	Saturday	Last day to change registration or to file schedule card without penalty.
Nov. 25	Thursday	Thanksgiving Day. Holiday.
Dec. 21	Tuesday, 4:10 p. m.	Christmas recess begins.
1938		
Jan. 3	Monday, 8:20 a. m.	Christmas recess ends.
Jan. 18-26	Tuesday-Wednesday	First semester examinations.

### Second Semester

Jan. 10-17	Monday-Monday	Registration for second semester.
Jan. 31	Monday	Last day to complete registration for second semester without payment of late registration fee.
Feb. 1	Tuesday, 8:20 a. m.	Instruction for second semester begins.
Feb. 7	Monday	Last day to change registration or to file schedule card without penalty.
Feb. 22	Tuesday	Washington's Birthday. Holiday.
March 25	Friday	Observance of Maryland Day.
April 14-19	Thursday, 4:10 p. m. Tuesday, 8:20 a. m.	Easter recess.
May 13-21	Friday-Saturday	Registration for first semester, 1938-1939.
May 23-June 1	Monday-Wednesday	Second semester examinations.
May 29	Sunday, 11:00 a. m.	Baccalaureate sermon.
May 30	Monday	Memorial Day. Holiday.
June 3	Friday	Class Day.
June 4	Saturday	Commencement.

### Summer Term

June 13-18	Monday-Saturday	Rural Women's Short Course.
June <del>25</del> 27	Wednesday	Summer Session begins.
Aug. <del>4</del> 5	<del>Tuesday</del> Friday	Summer Session ends.
Aug. 4-9	Thursday-Tuesday	Boys' and Girls' Club Week.
Sept. 6-8	Tuesday-Thursday	Volunteer Firemen's Short Course.
Sept. 12-14	Monday-Wednesday	Sanitary Engineering Short Course.
Sept. 12-14	Monday-Wednesday	Ministers' Conference.

## BALTIMORE (PROFESSIONAL SCHOOLS)

### First Semester

1937		
September 13	Monday	*Registration for evening students (LAW).
September 15	Wednesday	Instruction begins with the first scheduled period (LAW—Evening).
September 21	Tuesday	*Registration for first- and second-year students (DENTISTRY, MEDICINE, PHARMACY).
September 22	Wednesday	*Registration for all other students (DENTISTRY, LAW—Day, MEDICINE, PHARMACY).
September 23	Thursday	Instruction begins with the first scheduled period (DENTISTRY, LAW—Day, MEDICINE, PHARMACY).
November 24	Wednesday	Thanksgiving recess begins after the last scheduled period (ALL SCHOOLS).
November 29	Monday	Instruction resumed with the first scheduled period (ALL SCHOOLS).
December 18	Saturday	Christmas recess begins after the last scheduled period (ALL SCHOOLS).
1938		
January 3	Monday	Instruction resumed with the first scheduled period (ALL SCHOOLS).
January 24 to January 29, inc.	Monday-Saturday	*Registration for the second semester (ALL SCHOOLS).
January 29	Saturday	First semester ends after the last scheduled period (ALL SCHOOLS).

### Second Semester

January 31	Monday	Instruction begins with the first scheduled period (ALL SCHOOLS).
February 22	Tuesday	Washington's Birthday. Holiday.
April 13	Wednesday	Easter recess begins after the last scheduled period (ALL SCHOOLS).
April 20	Wednesday	Instruction resumed with the first scheduled period (ALL SCHOOLS).
June 4, 11:00 a. m.	Saturday	Commencement.
June 15,	Wednesday	Second semester ends (LAW — Evening).

- \* A student who neglects or fails to register prior to or within the day or days specified for his or her school will be called upon to pay a fine of five dollars (\$5.00). The last day of registration with fine added to regular fees is Saturday at noon of the week in which instruction begins following the specified registration period. (This rule may be waived only upon the written recommendation of the dean.)
- \* The offices of the registrar and comptroller are open daily, not including Saturday, from 9:00 a. m. to 5:00 p. m., and on Saturday from 9:00 a. m. to 12:30 p. m., with the following exceptions: Monday, September 13, 1937, until 8:00 p. m.; Saturday, September 25, 1937, until 5:00 p. m.; and on Saturday, January 29, 1938, until 5:00 p. m. Advance registration is encouraged.

### BOARD OF REGENTS

*Term Expires*

W. W. SKINNER, Chairman.....	1945
Kensington, Montgomery County	
MRS. JOHN L. WHITEHURST, Secretary.....	1938
4101 Greenway, Baltimore	
W. CALVIN CHESNUT.....	1942
Post Office Building, Baltimore	
WILLIAM P. COLE, JR.....	1940
Towson, Baltimore County	
HENRY HOLZAPFEL, JR.....	1943
Hagerstown, Washington County	
HARRY H. NUTTLE.....	1941
Denton, Caroline County	
J. MILTON PATTERSON.....	1944
Cumberland, Allegany County	
JOHN E. RAINE.....	1939
Towson, Baltimore County	
CLINTON L. RIGGS.....	1942
Catonsville, Baltimore County	



## OFFICERS OF ADMINISTRATION

H. C. BYRD, LL.D., President of the University.

H. J. PATTERSON, D.Sc., Director of the Agricultural Experiment Station;  
Dean of the College of Agriculture.

T. B. SYMONS, M.S., D.Agr., Director of the Extension Service.

T. H. TALIAFERRO, C.E., Ph.D., Dean of the College of Arts and Sciences.

J. M. H. ROWLAND, Sc.D., LL.D., M.D., Dean of the School of Medicine.

HENRY D. HARLAN, A.M., LL.B., LL.D., Dean Emeritus of the School of Law.

ROGER HOWELL, LL.B., Ph.D., Dean of the School of Law.

E. FRANK KELLY, Phar.D., D.Sc., Advisory Dean of the School of Pharmacy.

ANDREW G. DUMEZ, Ph.G., Ph.D., Dean of the School of Pharmacy.

T. O. HEATWOLE, M.D., D.D.S., D.Sc., Secretary of the Baltimore Schools.

J. BEN ROBINSON, D.D.S., F.A.C.D., Dean of the School of Dentistry.

W. S. SMALL, Ph.D., Dean of the College of Education, Director of the  
Summer Session.

M. MARIE MOUNT, A.B., M.A., Dean of the College of Home Economics.

C. O. APPLEMAN, Ph.D., Dean of the Graduate School.

A. J. LOMAS, M.D., D.P.H., Superintendent of the University Hospital.

ANNIE CRIGHTON, R.N., Superintendent of Nurses, Director of the School  
of Nursing.

S. S. STEINBERG, B.E., C.E., Acting Dean of the College of Engineering.

ADELE H. STAMP, M.A., Dean of Women.

J. D. PATCH, Lt. Col., Inf., U. S. Army, Professor of Military Science and  
Tactics.

H. T. CASBARIAN, B.C.S., C.P.A., Comptroller.

W. M. HILLEGEIST, Director of Admissions.

ALMA H. PREINKERT, M.A., Registrar.

F. K. HASZARD, B.S., Secretary to the President.

H. L. CRISP, M.M.E., Superintendent of Buildings and Grounds.

T. A. HUTTON, A.B., Purchasing Agent and Manager of Students' Supply  
Store (College Park).

## OFFICERS OF INSTRUCTION

For the Year 1936-1937

At College Park

### PROFESSORS

C. O. APPLEMAN, Ph.D., Professor of Botany and Plant Physiology, Dean of  
the Graduate School.

HAYES BAKER-CROTHERS, Ph.D., Professor of History.

✓ GRACE BARNES, B.S., B.L.S., M.A., Librarian.

F. W. BESLEY, Ph.D., Professor of Farm Forestry, State Forester.

L. A. BLACK, Ph.D., Professor of Bacteriology.

L. B. BROUGHTON, Ph.D., Professor of Chemistry, State Chemist, Chairman  
of the Pre-Medical Committee.

O. C. BRUCE, M.S., Professor of Soil Technology. (On leave of absence.)

B. E. CARMICHAEL, M.S., Professor of Animal Husbandry.

R. W. CARPENTER, A.B., LL.B., Professor of Agricultural Engineering.

E. N. CORY, Ph.D., Professor of Entomology, State Entomologist.

H. F. COTTERMAN, Ph.D., Professor of Agricultural Education.

MYRON CREESE, B.S., E.E., Professor of Electrical Engineering.

TOBIAS DANTZIG, Ph.D., Professor of Mathematics.

S. H. DEVAULT, Ph.D., Professor of Agricultural Economics.

NATHAN L. DRAKE, Ph.D., Professor of Organic Chemistry.

C. G. EICHLIN, A.B., M.S., Professor of Physics.

W. F. FALLS, Ph.D., Professor of Modern Languages.

HARRY GWINNER, M.E., Professor of Engineering Mathematics.

CHARLES B. HALE, Ph.D., Professor of English.

MALCOLM HARING, Ph.D., Professor of Physical Chemistry.

HOMER C. HOUSE, Ph.D., Professor of the English Language and Literature.

K. C. IKELER, M.E., M.S., Professor of Animal and Dairy Husbandry.

L. W. INGHAM, M.S., Professor of Dairy Husbandry.

LAWRENCE H. JAMES, Ph.D., Professor of Bacteriology.

A. N. JOHNSON, S.B., D.Eng., Professor of Highway Engineering, Dean  
Emeritus of the College of Engineering.

MORLEY A. JULL, Ph.D., Professor of Poultry Husbandry.

W. B. KEMP, Ph.D., Professor of Genetics and Statistics, Assistant Dean  
of the College of Agriculture.

EDGAR F. LONG, Ph.D., Professor of Education.

C. L. MACKERT, M.A., Professor of Physical Education for Men.

T. B. MANNY, Ph.D., Professor of Sociology.

FRITZ MARTI, Ph.D., Professor of Philosophy.

H. B. McDONNELL, M.S., M.D., Professor of Agricultural Chemistry.

✓ FRIEDA W. MCFARLAND, M.A., Professor of Textiles and Clothing.

✓ EDNA B. MCNAUGHTON, M.A., Professor of Home Economics Education.

DEVÖE MEADE, Ph.D., Professor of Animal and Dairy Husbandry.



- J. E. METZGER, B.S., M.A., Professor of Agronomy.  
 J. A. MILLER, B.S., Administrative Coördinator of Practice Teaching.  
 ✓ M. MARIE MOUNT, M.A., Professor of Home and Institution Management,  
 Dean of the College of Home Economics.  
 J. N. G. NESBIT, B.S., M.E., E.E., Professor of Mechanical Engineering.  
 J. B. S. NORTON, M.S., D.Sc., Professor of Systematic Botany and Mycology.  
 J. D. PATCH, Lt. Col., Inf., Professor of Military Science and Tactics.  
 C. J. PIERSON, A.M., Professor of Zoology.  
 R. C. REED, Ph.B., D.V.M., Professor of Animal Pathology.  
 C. S. RICHARDSON, A.M., Professor of Speech.  
 A. L. SCHRADER, Ph.D., Professor of Pomology.  
 W. S. SMALL, Ph.D., Professor of Education, Dean of the College of Educa-  
 tion, Director of the Summer Session.  
 J. W. SPROWLS, Ph.D., Professor of Psychology.  
 ✓ ADELE H. STAMP, M.A., Dean of Women.  
 S. S. STEINBERG, B.E., C.E., Professor of Civil Engineering, Acting Dean  
 of the College of Engineering, Acting Director of Engineering  
 Research.  
 T. H. TALIAFERRO, C.E., Ph.D., Professor of Mathematics, Dean of the Col-  
 lege of Arts and Sciences.  
 W. T. L. TALIAFERRO, A.B., D.Sc., Professor of Farm Management.  
 C. E. TEMPLE, M.A., Professor of Plant Pathology, State Plant Pathologist.  
 A. S. THURSTON, M.S., Professor of Floriculture and Landscape Gardening.  
 R. V. TRUITT, Ph.D., Professor of Zoology and Aquiculture.  
 R. H. WAITE, B.S., Professor of Poultry Husbandry.  
 HARRY WARFEL, Ph.D., Professor of English.  
 S. M. WEDEBERG, A.M., C.P.A., Professor of Economics and Business Admin-  
 istration.  
 ✓ CLARIBEL P. WELSH, M.A., Professor of Foods.

#### LECTURERS

- O. E. BAKER, Ph.D., Lecturer in Agricultural Economics.  
 RICHARD S. DILL, B.S., Lecturer on Heating, Ventilation, and Refrigeration.  
 HARRY R. HALL, B.S., Lecturer on Municipal Sanitation.  
 ROSCOE W. HALL, M.D., Clinical Lecturer in Psychology.  
 I. A. HYSLOP, M.S., Lecturer on Insect Taxonomy.  
 FRANK G. KEAR, E.E., M.S., D.Sc., Lecturer on Electrical Communications.  
 NELSON B. LASSON, LL.B., Ph.D., Lecturer in Political Science.  
 MIRIAM E. OATMAN, Ph.D., Lecturer in Political Science.  
 R. E. SNODGRASS, A.B., Lecturer on Insect Morphology.  
 CHARLES THOM, Ph.D., Lecturer on Soil Microbiology.  
 J. FRANKLIN YEAGER, Ph.C., Lecturer on Physiology of Insects.

#### ASSOCIATE PROFESSORS

- RONALD BAMFORD, Ph.D., Associate Professor of Botany.  
 MYRON H. BERRY, M.A., Associate Professor of Dairy Husbandry.  
 HENRY BRECHBILL, Ph.D., Associate Professor of Education.  
 H. B. CORDNER, M.S., Associate Professor of Olericulture.  
 CHARLES W. ENGLAND, Ph.D., Associate Professor of Dairy Manufacturing.  
 GEARY EPPLEY, M.S., Associate Professor of Agronomy, Director of Athletics.  
 W. A. FRAZIER, Ph.D., Associate Professor of Horticulture.  
 ✓ SUSAN EMOLYN HARMAN, Ph.D., Associate Professor of English.  
 I. C. HAUT, Ph.D., Associate Professor of Pomology.  
 L. J. HODGINS, B.S., Associate Professor of Electrical Engineering.  
 CARL S. JOSLYN, Ph.D., Associate Professor of Sociology.  
 C. F. KRAMER, A.M., Associate Professor of Modern Languages.  
 ✓ ELEANOR L. MURPHY, M.A., Associate Professor of Home Management.  
 A. J. NICHOL, Ph.D., Associate Professor of Economics and Business Admin-  
 istration.  
 N. E. PHILLIPS, Ph.D., Associate Professor of Zoology.  
 GEO. D. QUIGLEY, B.S., Associate Professor of Poultry Husbandry.  
 A. W. RICHESON, Ph.D., Associate Professor of Mathematics (Baltimore).  
 J. T. SPANN, B.S., Associate Professor of Mathematics.  
 REUBEN STEINMEYER, Ph.D., Associate Professor of Political Science.  
 R. P. THOMAS, Ph.D., Associate Professor of Soil Technology.  
 W. PAUL WALKER, M.S., Associate Professor of Agricultural Economics.  
 S. W. WENTWORTH, B.S., Associate Professor of Pomology.  
 CHARLES E. WHITE, Ph.D., Associate Professor of Chemistry.  
 R. C. WILEY, Ph.D., Associate Professor of Analytical Chemistry.  
 R. C. YATES, Ph.D., Associate Professor of Mathematics.

#### ASSISTANT PROFESSORS

- RUSSELL B. ALLEN, B.S., Assistant Professor of Civil Engineering.  
 WAYLAND S. BAILEY, M.S., Assistant Professor of Mechanical Engineering.  
 RUSSELL G. BROWN, Ph.D., Assistant Professor of Botany.  
 HOWARD CLARK, 2nd, Major, Inf., Assistant Professor of Military Science  
 and Tactics.  
 HARRY G. CLOWES, M.S., Assistant Professor of Sociology.  
 EUGENE B. DANIELS, Ph.D., M.F.S., Assistant Professor of Economics.  
 GEO. O. S. DARBY, Ph.D., Assistant Professor of Modern Languages.  
 HERMAN G. DUBUY, Ph.D., Assistant Professor of Plant Physiology.  
 RAY EHRENSBERGER, A.M., Assistant Professor of Speech.  
 R. T. FITZHUGH, Ph.D., Assistant Professor of English.  
 H. B. HOSHALL, B.S., M.E., Assistant Professor of Mechanical Engineering.  
 CHARLES H. JONES, Major, Inf., Assistant Professor of Military Science and  
 Tactics.  
 KATE KARPELES, M.D., Physician to Women.



PAUL KNIGHT, M.S., Assistant Professor of Entomology.  
 PHILIP R. LAYTON, LL.B., M.B.A., Assistant Professor of Economics and Business Administration.  
 F. M. LEMON, A.M., Assistant Professor of English.  
 ✓ JENNIE LORENZ, Ph.D., Assistant Professor of Speech.  
 GEO. MACHWART, Ph.D., Assistant Professor of Industrial Chemistry.  
 MONROE H. MARTIN, Ph.D., Assistant Professor of Mathematics.  
 M. A. PYLE, B.S., Assistant Professor of Civil Engineering.  
 AUGUSTUS J. PRAHL, Ph.D., Assistant Professor of Modern Languages.  
 RALPH RUSSELL, M.S., Assistant Professor of Agricultural Economics.  
 E. B. STARKEY, Ph.D., Assistant Professor of Organic Chemistry (Baltimore).  
 GUY P. THOMPSON, M.S., Assistant Professor of Zoology (Baltimore).  
 E. G. VANDEN BOSCHE, Ph.D., Assistant Professor of Inorganic Chemistry (Baltimore).  
 FRANK WARD, Capt. Inf. (D.O.L.), Assistant Professor of Military Science and Tactics.  
 ✓ MRS. F. H. WESTNEY, M.A., Assistant Professor of Textiles and Clothing.  
 ARNE WIKSTROM, E.E., Ph.D., Assistant Professor of Electrical Engineering.

#### INSTRUCTORS

✓ GEO. F. ALRICH, M.S., E.E., Instructor in Mathematics.  
 MARY BARTON, C.D.E.F., M.A., Instructor in Education, and Critic Teacher.  
 M. THOMAS BARTRAM, Ph.D., Instructor in Bacteriology.  
 J. B. BLANDFORD, Instructor in Horticulture.  
 S. O. BURHOE, M.S., Instructor in Zoology.  
 C. W. CISSEL, M.A., Instructor in Economics and Business Administration.  
 O. C. CLARK, B.S., Instructor in Physics.  
 ✓ ADELAIDE C. CLOUGH, M.A., Instructor in Education, and Critic Teacher.  
 ✓ BERYL H. DICKINSON, Ph.D., Instructor in Physics.  
 ✓ FRANK M. DOBSON, Instructor in Physical Education.  
 ✓ AMY J. ENGLUND, B.S., A.M., Instructor in Home Economics.  
 GEO. C. ERNST, M.S., Instructor in Civil Engineering.  
 J. E. FABER, JR., M.S., Instructor in Bacteriology.  
 GEORGE W. FOGG, M.S., Instructor in Library Science.  
 GARDNER H. FOLEY, M.A., Instructor in English (Baltimore).  
 L. C. HUTSON, Instructor in Mining Extension.  
 JOHN E. JACOBI, Ph.D., Instructor in Sociology.  
 ELIZABETH PHILLIPS JAMES, M.A., Instructor in Physical Education for Women.  
 ANDRE LIOTARD, B.A., B.D., Instructor in Modern Languages.  
 WM. H. MCMANUS, Warrant Officer, Instructor in Military Science and Tactics.  
 C. D. MURPHY, A.M., Instructor in English.  
 C. L. NEWCOMBE, Ph.D., Instructor in Zoology.  
 NILAN NORRIS, Ph.D., Instructor in Economics and Business Administration.

ARTHUR C. PARSONS, A.M., Instructor in Modern Languages (Baltimore).  
 MELVIN A. PITTMAN, M.S., Instructor in Physics (Baltimore).  
 J. THOMAS PYLES, M.A., Instructor in English (Baltimore).  
 HARLAN RANDALL, Instructor in Music.  
 MARK SCHWEIZER, M.A., Instructor in Modern Languages.  
 OTTO SIEBENEICHEN, Instructor in Band Music.  
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 ARTHUR SILVER, M.A., Instructor in History.  
 KATHLEEN M. SMITH, A.B., Ed.M., Instructor in Education.  
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 WM. F. VOLLBRECHT, Ph.D., Instructor in History.  
 G. S. WEILAND, Ph.D., Instructor in Chemistry.  
 JOSEPH C. WHITE, Ph.D., Instructor in Chemistry.  
 ✓ HELEN WILCOX, M.A., Instructor in Modern Languages.  
 MARK WOODS, Ph.D., Instructor in Plant Physiology.  
 LELAND G. WORTHINGTON, B.S., Instructor in Agricultural Education.

#### ASSISTANTS

✓ ELIZABETH ABBIATI, B.A., Assistant in Speech.  
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 ROLFE L. ALLEN, M. A., Assistant in History.  
 CECIL R. BALL, M.A., Assistant in English.  
 ✓ JEAN BARZHE, A.B., Assistant in Mathematics.  
 ✓ JESSIE BLAISDELL, Assistant in Music.  
 JACK Y. BRYAN, M.A., Assistant in English.  
 SPENCER CHASE, B.S., Assistant in Horticulture.  
 WESTON R. CLARK, M.A., Assistant in Psychology.  
 L. P. DITMAN, Ph.D., Assistant in Entomology.  
 NATHAN GAMMON, B.S., Assistant in Agronomy.  
 ARTHUR M. GIBSON, B.S., Assistant in Chemistry (Baltimore).  
 L. B. GOLDEN, B.S., Assistant in Agronomy.  
 ARTHUR B. HAMILTON, M.S., Assistant in Agricultural Economics.  
 HUGH A. HELLER, M.S., Assistant in Chemistry.  
 DONALD HENNICK, Assistant in Mechanical Engineering.  
 FRANK T. HOADLEY, B.A., Assistant in English.  
 LAWRENCE R. HOLMES, B.S., Assistant in English.  
 CHARLES D. HOWELL, A.B., Assistant in Zoology (Baltimore).  
 ✓ FRANCES IDE, M.A., Assistant in English.  
 BURRIDGE JENNINGS, B.S., Assistant in Physics (Baltimore).  
 L. J. KILBY, B.S., Assistant in Horticulture.  
 AUDREY KILLIAM, B.S., Assistant in Home Economics.



HYMAN N. LADEN, B.A., Assistant in Mathematics.  
 GEORGE F. MADIGAN, M.S., Assistant in Agronomy.  
 MARY JANE MCCURDY, B.S., Assistant in Home Economics.  
 PANOS MORPHOPOULOS, Ph.D., Assistant in Modern Languages (Baltimore).  
 WILLIAM K. MORRILL, Ph.D., Assistant in Mathematics.  
 ✓ LEONA S. MORRIS, A.B., Assistant in History.  
 ✓ MABEL I. MORRIS, A.M., Assistant in Mathematics.  
 ✓ CARROLL NASH, B.S., Assistant in Water Products.  
 BERNICE PIERSON, A.B., Assistant in Zoology (Baltimore).  
 ✓ MABEL PLATZ, Ph.D., Assistant in English.  
 JAMES H. REID, B.S.C., Assistant in Economics and Business Administration.  
 ANDRE C. SIMONPIETRI, Ph.D., Assistant in Modern Languages.  
 GEORGE L. SIXBEY, M.A., Assistant in English.  
 ✓ MILDRED SKINNER, A.B., Assistant in English.  
 WILLIAM D. STULL, M.S., Assistant in Zoology.  
 W. R. TEETER, B.S., D.V.M., Assistant in Animal Pathology.  
 C. J. WITTLER, M. A., Assistant in Sociology.

## GRADUATE ASSISTANTS

1936-1937

EARL ANDERSON.....	Botany
DAVID H. BALDWIN, JR.....	Chemistry
HOMER W. CARHART.....	Chemistry
ALARIC A. EVANGELIST.....	Modern Languages
HENRIETTA GOODNER .....	Modern Languages
C. W. HITZ.....	Horticulture
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WILLIAM A. HORNE.....	Chemistry
FRANK L. HOWARD.....	Chemistry
J. R. IVES.....	Agricultural Economics
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MICHAEL PELCZAR .....	Bacteriology
P. R. POFFENBERGER.....	Agricultural Economics
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## FELLOWS

1936-1937

JOHN M. BELLOWES, JR.	Botany
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ARTHUR B. HAMILTON, M.S. .... Assistant Agricultural Economist  
ROGER F. BURDETTE, M.S. .... Assistant Agricultural Economist

### *Agricultural Engineering:*

R. W. CARPENTER, A.B., LL.B. .... Agricultural Engineer

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†J. E. METZGER, B.S., M.A. .... Agronomist  
\*W. B. KEMP, Ph.D. .... Geneticist  
G. EPPLEY, M.S. .... Associate Agronomist (Crops)  
R. P. THOMAS, Ph.D. .... Soil Technologist  
\*\*O. C. BRUCE, M.S. .... Associate Soil Technologist  
R. G. ROTHGEB, Ph.D. .... Associate Geneticist (Plant Breeding)  
GEO. F. MADIGAN, M.S. .... Assistant in Soils  
E. H. SCHMIDT, M.S. .... Assistant in Soils  
H. B. WINANT, M.S. .... Assistant in Soils  
R. L. SELLMAN, B.S. .... Assistant in Agronomy, Supt. of Station Farm

### *Animal and Dairy Husbandry:*

K. C. IKELER, M.E., M.S. .... Animal and Dairy Husbandman  
DEVÖE MEADE, Ph.D. .... Animal and Dairy Husbandman  
B. E. CARMICHAEL, M.S. .... Animal Husbandman  
L. W. INGHAM, M.S. .... Dairy Husbandman  
M. H. BERRY, M.S. .... Associate Dairy Husbandman  
CHARLES W. ENGLAND, Ph.D. Associate Dairy Husbandman (Manufacturing)  
GEO. B. HUGHES, B.S. .... Assistant Dairy Husbandman (Manufacturing)  
C. M. MECHAM, M.S. .... Assistant Dairy Husbandman (Inspection)  
KEITH G. ACKER, M.S. .... Assistant Animal Husbandman

### *Animal Bacteriology and Pathology:*

MARK WELSH, D.V.M. .... State Veterinarian  
R. C. REED, Ph.B., D.V.M. .... Animal Pathologist  
A. L. BRUECKNER, B.S., D.V.M. .... Animal Pathologist  
L. J. POELMA, D.V.M., M.S. .... Assistant Animal Pathologist  
H. M. DEVOLT, M.S., D.V.M. .... Assistant Animal Pathologist (Poultry)  
C. L. EVERSON, D.V.M. .... Assistant Animal Pathologist (Baltimore)  
C. R. DAVIS, M.S., D.V.M. .... Assistant Animal Pathologist (Poultry)

† Assistant Director of Experiment Station.

\* Assistant Dean, College of Agriculture.

\*\* On leave of absence, State Soil Conservation (Erosion).



L. H. JAMES, Ph.D. Bacteriologist  
 A. L. BLACK, Ph.D. Bacteriologist  
 M. T. BARTRAM, M.S. Assistant Bacteriologist  
 J. E. FABER, M.S. Assistant Bacteriologist  
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 W. R. TEETER, B.S., D.V.M. Assistant Animal Pathologist

*Botany, Pathology, Physiology:*

\*C. O. APPLEMAN, Ph.D. Plant Physiologist and Botanist  
 J. B. S. NORTON, M.S., D.Sc. Plant Pathologist  
 C. E. TEMPLE, M.S. Plant Pathologist  
 R. A. JEHL, Ph.D. Associate Plant Pathologist  
 RONALD BAMFORD, Ph.D. Associate Botanist  
 RUSSELL G. BROWN, Ph.D. Assistant Physiologist  
 HERMAN G. DUBUY, Ph.D. Assistant Physiologist  
 MARK WOODS, Ph.D. Assistant Pathologist

*Entomology:*

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 L. P. DITMAN, Ph.D. Assistant Entomologist  
 C. GRAHAM, M.S. Assistant Entomologist  
 GEO. ABRAMS, M.S. Assistant Entomologist

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 F. B. LINCOLN, Ph.D. Associate Pomologist (Plant Propagation)  
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 R. H. WAITE, B.S. Poultry Husbandman  
 GEO. D. QUIGLEY, B.S. Associate Poultry Husbandman

*Ridgely Sub-Station:*

ALBERT WHITE, B.S. Superintendent

*Seed Inspection:*

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 ELLEN EMACK Assistant Seed Analyst  
 OLIVE KELK Assistant Seed Analyst  
 ELIZABETH SHANK Assistant

\* Dean of Graduate School.

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 E. G. JENKINS, State Boys' Club Agent  
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 FLORENCE H. MASON, B.S.,  
 District Home Demonstration Agent, and Specialist in Home Furnishing  
 K. GRACE CONNOLLY, Administrative Assistant  
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### SUBJECT MATTER SPECIALISTS

(Headquarters College Park)

W. R. BALLARD, B.S. Vegetable and Landscape Gardening  
 H. C. BARKER, B.S. Dairying (Advanced Registry Testing)  
 W. C. BEAVEN, B.S. Marketing  
 R. W. CARPENTER, A.B., LL.B. Agricultural Engineering  
 J. A. CONOVER, B.S. Dairying  
 E. N. CORY, Ph.D. Entomology and Apiculture  
 S. H. DEVAULT, Ph.D. Marketing  
 JESSIE D. HINTON, M.S. Home Management  
 H. A. HUNTER, M.S. Canning Crops  
 K. C. IKELER, Ph.D. Dairy and Animal Husbandry  
 R. A. JEHL, Ph.D. Plant Pathology  
 E. C. JENKINS, M.S. Soil Conservation  
 M. A. JULL, Ph.D. Poultry Husbandry  
 A. V. KREWATCH, M.S., E.E. Rural Electrification  
 G. S. LANGFORD, Ph.D. Insect Control  
 MARGARET MCPHEETERS, M.S. Nutrition  
 T. B. MANNY, Ph.D. Rural Sociology  
 DEVOE MEADE, Ph.D. Animal Husbandry  
 F. W. OLDENBURG, B.S. Agronomy  
 W. B. POSEY, B.S. Tobacco  
 HARLAN RANDALL Music  
 P. A. RAPER, B.S. Poultry Certification and Marketing  
 W. H. RICE, B.S. Poultry



C. S. RICHARDSON, A.M.	Educational Extension
S. B. SHAW, B.S.	Marketing; and Chief, State Department of Markets
HELEN SHELBY, M.A.	Clothing
M. M. SHOEMAKER, A.B., M.L.D.	Landscape Gardening
W. W. SIMONDS, M.F.	Forestry
C. E. TEMPLE, M.A.	Plant Pathology
J. M. VIAL, B.S.	Animal Husbandry
A. F. VIERHELLER, M.S.	Horticulture
E. P. WALLS, Ph.D.	Marketing and Canning Crops
C. F. WINSLOW, A.B., M.F.	Forestry

#### ASSISTANT SUBJECT MATTER SPECIALISTS

(Headquarters College Park)

G. J. ABRAMS, M.S.	Apiculture
L. E. DOWNEY, B.S.	Marketing
M. S. DOWNEY, B.S.	Club Work
H. A. EDGE, M.S.	Farm Management and Statistics
CASTILLO GRAHAM, M.S.	Entomology
W. E. HARRISON	Marketing
H. J. TWILLEY, B.S.	Marketing

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County	Name	Headquarters
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Calvert	JOHN B. MORSELL, B.S.	Prince Frederick
Caroline	G. W. CLENDANIEL, B.S.	Denton
Carroll	L. C. BURNS, B.S.	Westminster
Cecil	J. Z. MILLER, B.S.	Elkton
Charles	PAUL D. BROWN, B.S.	La Plata
Dorchester	WM. R. MCKNIGHT, B.S.	Cambridge
Frederick	H. R. SHOEMAKER, B.S., M.A.	Frederick
Garrett	JOHN H. CARTER, B.S.	Oakland
Harford	H. M. CARROLL, B.S.	Bel Air
Howard	E. K. RAMSBURG, B.S.	Ellicott City
Kent	JAMES D. McVEAN, B.S.	Chestertown
Montgomery	O. W. ANDERSON, M.S.	Rockville
Prince Georges	P. E. CLARK, B.S.	Upper Marlboro
Queen Annes	K. W. BAKER, B.S.	Centreville

St. Marys	J. J. JOHNSON	Leonardtown
Somerset	C. Z. KELLER, B.S.	Princess Anne
Talbot	R. S. BROWN, B.S.	Easton
Washington	M. D. MOORE, M.S.	Hagerstown
Wicomico	J. P. BROWN, B.S.	Salisbury
Worcester	R. T. GRANT, B.S.	Snow Hill

#### Assistant County Agents

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Harford	W. G. MYERS, B.S.	Bel Air
Kent	STANLEY SUTTON	Chestertown
Montgomery	A. A. ADY, B.S.	Rockville
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#### Local Agents—Negro Work

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Carroll	ADELIN M. HOFFMAN, M.A.	Westminster
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Charles	MARY GRAHAM	La Plata
Dorchester	HATTIE E. BROOKS, A.B.	Cambridge
Frederick	FLORENCE E. WILLIAMS, B.S.	Frederick
Garrett	MILDRED BARTON, B.S.	Oakland
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 L. EDWARD WOJNAROWSKI, D.D.S., Instructor in Clinical Prosthetic Dentistry.  
 GEORGE H. YEAGER, B.S., M.D., Instructor in Surgery.

#### ASSISTANTS

CONRAD B. ACTON, B.S., M.D., Assistant in Pathology and Medicine.  
 ELIZABETH AITKENHEAD, R.N., Assistant Instructor in Surgical Technic for Nurses and Supervisor of Operating Pavilion.  
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 MARGARET B. BALLARD, M.D., Assistant in Obstetrics.  
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 FRANK A. BELLMAN, B.S., Assistant in Pharmacy.  
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 CARL BENSON, M.D., Assistant in Medicine.



JOSEPH C. BERNSTEIN, M.D., Assistant in Dermatology.  
 DUDLEY P. BOWE, A.B., M.D., Assistant in Obstetrics.  
 SIMON H. BRAGER, M.D., Assistant in Surgery.  
 BERNICE BRITTAIN, R.N., Assistant Superintendent of Nurses.  
 RUTH BROADBELT, Instructor in Lettering.  
 DOUGLAS A. BROWNING, D.D.S., Assistant in Embryology and Histology.  
 LUCY A. BRUDE, R.N., Assistant Instructor in Nursing Private Patients and Supervisor of Private Halls.  
 SAMUEL H. BRYANT, D.D.S., Assistant in Exodontia.  
 A. V. BUCHNESS, M.D., Assistant in Surgery.  
 L. T. CHANCE, M.D., Assistant in Surgery.  
 ETHEL CHANEY, R.N., Supervisor, Out-Patients' Department.  
 BEVERLY C. COMPTON, A.B., M.D., Assistant in Gynecology.  
 EUGENE COVINGTON, M.D., Assistant in Gross Anatomy.  
 MARIE OLGA COX, R.N., Assistant Instructor in First Aid and Supervisor of Accident and Admission Department.  
 JOHN M. CROSS, B.S., Assistant in Pharmacy.  
 SAMUEL H. CULVER, M.D., Assistant in Surgery.  
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 GUSTAV EDWARD CVALINA, B.S. in Phar., M.S., Assistant in Pharmaceutical Chemistry.  
 E. HOLLISTER DAVIS, A.B., M.D., Assistant in Anesthesia.  
 W. ALLEN DECKERT, M.D., Assistant in Surgery, Obstetrics, and Gynecology.  
 AMELIA C. DEDOMINICIS, B.S. in Phar., M.S., Assistant in Botany.  
 JOHN C. DUMLER, B.S., M.D., Assistant in Gynecology and Oncology.  
 MELVIN F. W. DUNKER, B.S. in Phar., M.S., Assistant in Chemistry.  
 MARY EMORY, R.N., Night Supervisor.  
 FRED A. FAZENBAKER, R.N., Assistant Instructor in Surgical Nursing and Supervisor of Surgical Wards.  
 S. C. FELDMAN, M.D., Assistant in Pediatrics.  
 J. G. FEMAN, M.D., Assistant in Medicine.  
 MORRIS FINE, M.D., Assistant in Medicine.  
 PHILIP D. FLYNN, M.D., Assistant in Medicine.  
 CARROLL P. FOSTER, B.S., Assistant in Chemistry.  
 RICHARD FRANCE, M.D., Assistant in Medicine.  
 H. D. FRANKLIN, M.D., Assistant in Pediatrics.  
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 FRANCIS W. GILLIS, M.D., Assistant in Surgery.  
 JULIUS GOODMAN, M.D., Assistant in Surgery.  
 HAROLD GOLDSTEIN, D.D.S., Assistant in Exodontia.  
 GEORGE GOVATOS, M.D., Assistant in Surgery.  
 R. WALTER GRAHAM, JR., M.D., Assistant in Surgery.  
 J. WILLIS GUYTON, M.D., Assistant in Surgery.  
 MAURICE HARDIN, R.N., Assistant Instructor in Medical Nursing and Supervisor of Medical Wards.  
 RAYMOND F. HELFRICH, M.D., Assistant in Surgery.  
 W. GRAFTON HERSPERGER, M.D., Assistant in Medicine.  
 GUSTAV HIGHSTEIN, M.D., Assistant in Pediatrics.  
 BERTHA HOFFMAN, R.N., Assistant Instructor in Medical and Surgical Supplies, and Supervisor of Central Supply Room.  
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 CHARLES D. HOWELL, A.B., Assistant in Zoology.  
 HARRY C. HULL, M.D., Assistant in Pathology and Surgery.  
 WILLIAM H. HUNT, Ph.G., M.S., Assistant in Pharmacology.  
 JAMES A. JARVIS, A.B., B.S., M.D., Assistant in Neurology.  
 B. JENNINGS, A.B., M.D., Assistant in Physics and Obstetrics.  
 MARIUS P. JOHNSON, A.B., M.D., Assistant in Pharmacology and Obstetrics.  
 ROBERT W. JOHNSON, M.D., Assistant in Pathology and Surgery.  
 H. ALVAN JONES, M.D., Assistant in Surgery.  
 CLYDE F. KARNS, M.D., Assistant in Surgery.  
 LAURISTON L. KEOWN, M.D., Assistant in Pediatrics.  
 WINIFRED KEYES, B.S., Assistant in Pharmacy.  
 WALTER L. KILBY, M.D., Assistant in Roentgenology.  
 HARRY V. LANGELOTTIG, A.B., M.D., Assistant in Pathology and Medicine.  
 PHILIP F. LERNER, A.B., M.D., Assistant in Neurology.  
 H. EDMUND LEVIN, B. S., M.D., Assistant in Bacteriology.  
 NATHAN LEVIN, B.S., Assistant in Bacteriology.  
 I. H. MASERITZ, M.D., Assistant in Orthopædic Surgery.  
 BIRKHEAD MCGOWAN, M.D., Assistant in Diseases of the Nose and Throat, and Otology.  
 HOWARD B. MCELWAIN, M.D., Assistant in Surgery.  
 WILLIAM N. McFAUL, JR., M.D., Assistant in Surgery.  
 SAMUEL McLANAHAN, JR., M.D., Assistant in Surgery.  
 BERNARD P. McNAMARA, B.S., Assistant in Pharmacy.  
 ISRAEL P. MERANSKI, M.D., Assistant in Pediatrics.



JULIUS MESSINA, B.S. in Phar., Assistant in Chemistry.  
 HOWARD ANTHONY MILLER, B.S. in Phar., Assistant in Pharmacy.  
 SYLVIA MILLETT, B.S. in Phar., M.S., Assistant in Economics.  
 DWIGHT MOHR, M.D., Assistant in Surgery.  
 WILLIAM K. MORRILL, Ph.D., Assistant in Mathematics.  
 FRANK K. MORRIS, A.B., M.D., Assistant in Surgery, Obstetrics, and Gynecology.  
 E. L. MORTIMER, JR., Assistant in Orthopædic Surgery.  
 THOMAS A. MOSKEY, JR., B.S., Assistant in Pharmacy.  
 J. W. NELSON, M.D., Assistant in Surgery.  
 JOSEPH NURKIN, M.D., Assistant in Diseases of the Nose and Throat.  
 JAMES C. OWINGS, M.D., Assistant in Surgery and Diseases of the Rectum and Colon.  
 C. W. PEAKE, M.D., Assistant in Surgery.  
 BERNICE F. PIERSON, M.S., Assistant in Zoology.  
 H. WILLIAM PRIMAKOFF, M.D., Assistant in Gastro-Enterology.  
 SAMUEL E. PROCTOR, M.D., Assistant in Surgery.  
 E. M. REESE, M.D., Assistant in Medicine.  
 ROBB V. RICE, B.A., B.S. in Phar., M.S., Assistant in Pharmacy.  
 BENJAMIN S. RICH, M.D., Assistant in Otology.  
 ELDRED ROBERTS, M.D., Assistant in Oncology.  
 JOHN G. RUNKLE, M.D., Assistant in Ophthalmology.  
 JOHN E. SAVAGE, B.S., M.D., Assistant in Pathology and Obstetrics.  
 A. SCAGNETTI, M.D., Assistant in Medicine.  
 PAUL SCHENKER, M.D., Assistant in Surgery.  
 DOROTHY E. SCHMALZER, B.S., Assistant in Biological Chemistry.  
 W. J. SCHMITZ, M.D., Assistant in Pediatrics.  
 RICHARD T. SHACKELFORD, M.D., Assistant in Surgery.  
 HARRY S. SHELLEY, B.S., M.D., Assistant in Genito-Urinary Surgery.  
 M. S. SHILING, M.D., Assistant in Medicine.  
 ALBERT J. SHOCHAT, M.D., Assistant in Gastro-Enterology.  
 EMANUEL V. SHULMAN, Ph.C., B.S. in Phar., Ph.D., Assistant in Botany.  
 SOL SMITH, M.D., Assistant in Medicine.  
 JEROME SNYDER, M.D., Assistant in Ophthalmology.  
 O. WALTER SPURRIER, M.D., Assistant in Pediatrics.  
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 ROBERT B. TAYLOR, M.D., Assistant in Dermatology.  
 T. J. TOUHEY, M.D., Assistant in Surgery.  
 I. RIDGEWAY TRIMBLE, M.D., Assistant in Surgery.

HENRY F. ULLRICH, M.D., Assistant in Orthopædic Surgery.  
 NELSA LEE WADE, M.D., Assistant in Pediatrics.  
 EDITH WALTON, Instructor in Massage.  
 H. WHITNEY WHEATON, M.D., Assistant in Pediatrics.  
 ALBERT R. WILKERSON, M.D., Assistant in Surgery.  
 J. H. WILKERSON, M.D., Assistant in Surgery.  
 J. E. WILSON, JR., A.B., M.D., Assistant in Pathology.  
 CHARLES A. YOUCH, B.S., Assistant in Pharmacy.



## FACULTY COMMITTEES

### At Baltimore

#### LIBRARY

(Medicine) Doctors Lockard, Wylie, and Love, Jr.; (Dentistry) Doctors Gaver, Aisenberg, and Hardy; (Pharmacy) Dean DuMez, Messrs. Hartung, M. R. Thompson, and Slama; (Law) Messrs. Ritchie and Strahorn.

The Faculty Councils of the Baltimore Schools are included in the descriptive statements of the respective schools in Section II.

The Faculty Committees of the Baltimore Schools are given in the separate announcements issued by the several schools.

## SECTION I General Information

### HISTORICAL STATEMENT

The history of the present University of Maryland, before the merger in 1920, is the history of two institutions: the old University of Maryland in Baltimore and the Maryland State College (formerly Maryland Agricultural College) in College Park.

The beginning of this history was in 1807, when a charter was granted to the College of Medicine of Maryland. The first class was graduated in 1810. A permanent home was established in 1814-1815 by the erection of the building at Lombard and Greene Streets in Baltimore, the oldest structure in America devoted to medical teaching. Here was founded one of the first medical libraries (and the first medical school library) in the United States. In 1812 the General Assembly of Maryland authorized the College of Medicine of Maryland to "annex or constitute faculties of divinity, law, and arts and sciences," and by the same act declared that the "colleges or faculties thus united should be constituted an university by the name and under the title of the University of Maryland." By authority of this act, steps were taken in 1813 to establish "a faculty of law," and in 1823 a regular school of instruction in law was opened. Subsequently there were added a college of dentistry, a school of pharmacy, and a school of nursing. No significant change in the organization of the University occurred until 1920, more than one hundred years after the original establishment in 1812.

The Maryland State College was chartered in 1856 under the name of the Maryland Agricultural College, the second agricultural college in the Western Hemisphere. For three years the College was under private management. In 1862 the Congress of the United States passed the Land Grant Act. This act granted each State and Territory that should claim its benefits a proportionate amount of unclaimed western lands, in place of scrip, the proceeds from the sale of which should apply under certain conditions to the "endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." This grant was accepted by the General Assembly of Maryland, and the Maryland Agricultural College was named as the beneficiary of the grant. Thus the College became, at least in part, a State institution. In the fall of 1914 control was taken over en-



tirely by the State. In 1916 the General Assembly granted a new charter to the College, and made it the Maryland State College.

In 1920, by an act of the State Legislature, the University of Maryland was merged with the Maryland State College, and the name of the latter was changed to the University of Maryland.

All the property formerly held by the old University of Maryland was turned over to the Board of Trustees of the Maryland State College, and the name was changed to the Board of Regents of the University of Maryland. Under this charter every power is granted necessary to carry on an institution of higher learning and research. It provides that the University shall receive and administer all existing grants from the Federal Government for education and research and all future grants which may come to the State from this source. The University is co-educational in all its branches.

### ADMINISTRATIVE ORGANIZATION

The government of the University is vested by law in a Board of Regents, consisting of nine members appointed by the Governor each for a term of nine years. The administration of the University is vested in the President. The University Senate and the Administrative Council act in an advisory capacity to the President. The composition of these bodies is given elsewhere.

The University organization comprises the following administrative divisions:

- College of Agriculture.
- Agricultural Experiment Station.
- Extension Service.
- College of Arts and Sciences.
- College of Education.
- College of Engineering.
- College of Home Economics.
- Graduate School.
- Summer Session.
- Department of Military Science and Tactics.
- Department of Physical Education and Recreation.
- School of Dentistry.
- School of Law.
- School of Medicine.
- School of Nursing.
- School of Pharmacy.
- The University Hospital.

The University faculty consists of the President, the Deans, the instructional staffs of all the divisions of the University, and the Librarians. The faculty of each college or school constitutes a group which passes on all questions that have exclusive relationship to the division represented. The President is ex-officio a member of each of the faculties.

The organization and activities of the several administrative divisions are described in full in the appropriate chapters of Section II.

### PRINCESS ANNE COLLEGE

Princess Anne College, located at Princess Anne, Somerset County, is maintained for the education of Negroes in agriculture, the mechanic arts, and home economics.

### LOCATION

The University of Maryland is located at College Park, in Prince George's County, Maryland, on the Baltimore and Ohio Railroad, eight miles from Washington and thirty-two miles from Baltimore. The campus fronts on the Baltimore-Washington Boulevard.

The Professional Schools of the University and the University Hospital are located in the vicinity of Lombard and Greene Streets, Baltimore.

### GROUND AND BUILDINGS

#### College Park

**Grounds.** The University grounds at College Park comprise 291 acres. The site is healthful and attractive. The terrain is varied. A broad rolling campus is surmounted by a commanding hill which overlooks a wide area of surrounding country and insures excellent drainage. Many of the original forest trees remain. Most of the buildings are located on this eminence. The adjacent grounds are laid out attractively in lawns and terraces ornamented with shrubbery and flower beds. Below the brow of the hill, on either side of the Washington-Baltimore Boulevard, lie the drill grounds and the athletic fields. The buildings of the Agricultural Experiment Station adjoin the boulevard. About 100 acres are used by the College of Agriculture for experimental purposes, and for orchards, vineyards, poultry yards, etc. Recently 270 acres additional have been purchased, about two miles north of the University campus, and this land is devoted especially to research in horticulture.

The water supply and sewage disposal are provided by the Washington Suburban Sanitary Commission.

**Buildings.** The buildings comprise about 28 individual structures, which provide facilities for the several activities and services carried on at College Park.

**Administration and Instruction.** This group consists of the following buildings: the Agriculture Building, which accommodates the College of Agriculture, the College of Education, the Agricultural and Home Economics Extension Service, and the Auditorium; the Library Building, which



houses the Library and the Executive Offices; Morrill Hall, which accommodates in part the College of Arts and Sciences; the Old Library Building, in which are the offices of the Dean of Women; the Engineering Building; the Student Center, in which are located the offices of the student publications, the Religious Work Council, and the Maryland Christian Association; the Home Economics Building; the Chemistry Building for instruction in Chemistry and for State work in analysis of feeds, fertilizers, and agricultural lime; the Dairy Building; the Horticulture Building, which adequately accommodates all class room and laboratory work in horticulture, and also work in horticultural research for both Government and State; the Plant Research Building; the poultry buildings; the Central Heating Plant; and an Arts and Sciences Building.

*Experiment Station.* The offices of the Director of the Experiment Station are in the Agriculture Building, while other buildings house the laboratories for research in soils and for seed testing. Other structures are as follows: an agronomy building; a secondary horticulture building; and barns, farm machinery building, silos, and other structures required in agricultural research. Some of the research is being conducted in the Ross-bourg Inn.

*Physical Education.* This group consists of The Ritchie Coliseum, which provides quarters for all teams, an athletic office, trophy room, rooms for faculty, and visiting team rooms, together with a playing floor and permanent seating arrangements for 4,262 persons; Byrd Stadium, with a permanent seating capacity of 8,000, also furnished with rest rooms for patrons, dressing rooms, and equipment for receiving and transmitting information concerning contests in progress; a Gymnasium, used in part by the Military Department and generally for physical education work; and the Girls' Field House, for all girls' sports. Playing and practice fields and tennis courts are adjacent to the field houses.

*Dormitories.* Two dormitories, Calvert Hall and Silvester Hall, provide accommodations for 462 men students. Accommodations for 228 women students are provided by Margaret Brent Hall and the new dormitory, completed this year. Gerneaux Hall, formerly used as a dormitory for women students, is now occupied by one of the sororities. The Practice House, which for several years was used as a dormitory, has been turned over entirely to the Home Economics Department.

*Service Structures.* This group includes the Central Heating Plant; the Infirmary, with accommodations for twenty patients, physician's office, operating room, and nursing quarters; Dining Hall, and Laundry.

*U. S. Bureau of Mines Building.* A new research laboratory building for the United States Bureau of Mines was completed this year, and will be officially dedicated on October 15, 1937. In addition to the general laboratories, which will be used for instruction in engineering as well as by the United States Government, there is a geological museum and technical library, one of the finest of its kind in the United States.

## Baltimore

The group of buildings located in the vicinity of Lombard and Greene Streets provides available housing for the Baltimore division of the University. The group comprises the original Medical School building, erected in 1814, the University Hospital, the Central Office building, a new Laboratory building for the Schools of Dentistry and Pharmacy, and a new Law School building. Full descriptions of these parts of the University equipment are found in the chapters devoted to the Baltimore Schools in Section II.

A new University Hospital, at the corner of Greene and Redwood Streets, containing 400 beds and providing fine clinical facilities, was completed in November, 1934.

## Libraries

Libraries are maintained at both the College Park and the Baltimore branches of the University.

The Library Building at College Park houses the executive offices, post-office, and students' supply store. The building is well equipped and well lighted. The reading room on the second floor has seats for 236, and about 4,500 reference books and periodicals on open shelves, the other books being kept in the stack room and three seminar rooms. The stack room is equipped with five tiers of metal stacks and 18 cubicles for advanced study. About 13,500 of the 70,000 books on the campus are shelved in the Engineering, Chemistry, and Entomology Departments, the Graduate School, and other units.

The Library facilities in Baltimore for the School of Medicine are housed in Davidge Hall; those for the Schools of Dentistry and Pharmacy and the courses in Arts and Sciences are located in the Dentistry and Pharmacy Building; and those for the School of Law are in the new Law Building.

The libraries, main and departmental, contain a total of 110,000 bound volumes, and large collections of unbound journals. In the two central libraries there are approximately 12,000 United States Government documents, unbound reports, and pamphlets.

Through the Inter-library Loan Systems of the Library of Congress, the United States Department of Agriculture, and other Government Libraries in Washington, the University Library is able to supplement its reference material, either by arranging for personal work in these Libraries or by borrowing books from them.

## ADMISSION

All correspondence regarding admission should be addressed to the Director of Admissions. That pertaining to the colleges of Agriculture, Arts and Sciences, Education, Engineering, Home Economics, the Graduate School,



and the Summer Session should be sent to the University of Maryland, College Park; that relating to the schools of Dentistry, Law, Medicine, Nursing, and Pharmacy should be mailed to the University of Maryland, Lombard and Greene Streets, Baltimore.

Information about admission to the professional schools in Baltimore will be found in their respective sections of this catalogue (see index), and in the bulletins issued by the several schools.

**Age of Applicants:** A student who is less than sixteen years of age must have his residence with his parents or guardians.

**Admission Procedure:** Candidates for admission should procure application blanks from the office of the Director of Admissions as early as possible. It would not be too soon for secondary school seniors to write for the blanks shortly after the beginning of their final school term.

If the application, with the school record through the first semester of the senior year, is returned before graduation to the Director of Admissions, then the applicant should request the principal to send in a supplementary report after graduation—with the grades of the final term, a statement of the date of graduation, and the rank of the student in the graduating class. All other candidates for admission, also, should submit their applications as early as possible.

A certificate of admission and material pertaining to registration will be mailed to each applicant whose credentials are acceptable. The Director of Admissions will be pleased to advise, either in person or by correspondence, with prospective students, their parents, or other interested persons concerning the preparation of the applicants, or on any questions that relate to admission to the University.

**Time of Admission:** Applicants for admission should plan to enter the University at the beginning of the school year in September. It is possible, however, to be admitted to certain curricula at the beginning of either semester.

**Registration:** Freshmen will register on Thursday and Friday, September 16 and 17, 1937. All other new students will register on Saturday, September, 18, 1937.

Dormitories will be ready for occupancy by freshmen on Wednesday, September 15, 1937.

A special freshman program will be followed between registration and the beginning of the instruction schedule, the object of which is to complete the organization of freshmen so that they may begin their regular work promptly and effectively, and familiarize themselves with their new surroundings.

## ADMISSION FROM SECONDARY SCHOOLS

An applicant from a secondary school may be admitted either by certificate or by examination or by a combination of the two methods.

**Admission by Certificate:** An applicant must be a graduate of a secondary school which is approved by the State Board of Education of Maryland or by an accrediting agency of at least equal rank, and which requires for graduation not less than fifteen units. A unit represents a year's study in any subject in a secondary school, and constitutes approximately one-fourth of a full year's work. It presupposes a school year of 36 to 40 weeks, recitation periods of from 40 to 60 minutes, and for each study four or five class exercises a week. A double laboratory period in any science or vocational study is considered equivalent to one class exercise. Normally, not more than three units are allowed for four years of English. If, however, a fifth course has been taken, an extra unit will be granted.

A graduate of an approved secondary school in Maryland who meets the state certification requirements, or a graduate of an approved secondary school in the District of Columbia who meets the certification grade of his secondary school, will be admitted upon presentation of the proper certificate from the principal. A graduate who does not meet fully these requirements may be required to present further evidence of ability to undertake college work. At the discretion of the Director of Admissions, this may include an appropriate examination. Admission examinations will be given during the first week of each of the months of July, August, and September at College Park and other convenient places in the state. Applicants concerned will be notified as to when and where to report.

An applicant for admission by certificate from a secondary school not located in Maryland or in the District of Columbia must be recommended by the principal, and must have attained the certification-to-college grade of the school. If the school does not have such a quality grade, then the average of the applicant's school grades must be at least ten points or one letter higher than the lowest passing grade of the school.

**Admission by Examination:** An applicant from a secondary school who is not eligible for admission by certificate may seek entrance through either of two types of examination: (1) he may appeal to the Director of Admissions for permission to report at the University for an examination, the result of which will be used in conjunction with the secondary school record to determine whether the applicant should be admitted; or (2) he may be admitted on presenting evidence of having passed satisfactorily other approved examinations in the subjects required for graduation from an accredited secondary school. Such examinations are offered by the College Entrance Examination Board, 431 West 117th Street, New York City; the Regents of the University of the State of New York, Albany; and the Department of Public Instruction of the State of Pennsylvania, Harrisburg.



## UNDERGRADUATE CURRICULA

The following undergraduate courses of study are available, the letters placed after the names of the curricula referring to the columnar arrangement of the entrance requirements below:

Agricultural Economics and Farm Management—A	Engineering Civil—C
Agriculture, General—A	Electrical—C
Agronomy	Mechanical—C
Farm Crops—A	English—A
Soils—A	Entomology—A
Animal Husbandry—A	French—A
Bacteriology and Pathology—A	General Science—A
Botany	German—A
General Botany and Morphology—A	History—A
Plant Pathology—A	Home Economics
Plant Physiology—A	Extension—B
Business Administration	Foods—B
Accounting and Finance—A	General—B
General—A	Institution Management—B
Chemistry	Textiles and Clothing—B
Agricultural—A	Horticulture
Biological—A	Floriculture—A
General—A	Landscape Gardening—A
Industrial—A	Olericulture—A
Dairy Husbandry	Pomology—A
Dairy Manufacturing—A	Mathematics—C
Dairy Production—A	Physics—C
Economics—A	Political Science—A
Education	Poultry Husbandry—A
Agricultural—A	Predental—A
Arts and Sciences—A	Prelaw—A
Commercial—E	Premedical—D
Home Economics—B	Prenursing—A
Industrial—A	Preveterinary—A
Physical—A	Sociology—A
	Spanish—A
	Zoology—A

The requirements for admission to the foregoing curricula are indicated in the following table, the requirements for a particular curriculum being

given in the column headed by the letter which follows the name of the curriculum in the above list:

	A	B	C	D	E
English .....	3	3	3	3	3
Algebra .....	1		**2	1	1
Plane Geometry.....	*1		1	1	
Solid Geometry.....			**1½		
Mathematics .....		2			
History .....	1	1	1	1	1
Science .....	1	1	1	1	1
Foreign Language.....				2	
Stenography .....					2
Typewriting .....					1
Bookkeeping .....					1
Electives .....	8	8	6½	6	5

**Conditional Admission:** An applicant who is eligible otherwise to be admitted to the University, but who cannot meet the specific entrance units required for the curriculum of his choice may register as a non-classified student. Classification as a regular student is automatic when the entrance deficiency is absolved. (See exception for a student in engineering at the foot of this page.)

### ADMISSION BY TRANSFER FROM OTHER COLLEGES AND UNIVERSITIES

A candidate for admission by transfer from another college or university must present evidence that he has maintained a satisfactory and honorable record at the other institution. The applicant should file as early as possible the formal application blank (which may be obtained from the office of the Director of Admissions), together with an official transcript of the complete college record, including a statement of honorable dismissal.

Advanced standing is granted for courses completed elsewhere which are equivalent in extent and quality to those given by the University of Maryland, subject to the following provisions:

- (1) Regardless of the amount of advanced standing a student may secure, the baccalaureate degree will not be given under any circumstances until a year of resident work shall have been completed.

\*In the College of Agriculture, with the exception of curricula which include trigonometry, a second unit of any mathematics may be substituted for the requirement in plane geometry, provided the applicant ranks in the upper three-fifths of his secondary school class.

\*\*An applicant who cannot offer the second unit in algebra and the one-half unit in solid geometry may be admitted to the College of Engineering, but will be obliged during the first semester to make up the advanced algebra and solid geometry. The regular first semester engineering mathematics would be taken in the second semester, and the second semester mathematics would be taken in the summer session. An applicant who does not have entrance credit for solid geometry would take this course concurrently with the regular first semester mathematics. Students in either of these groups would register with regular classification.



- (2) Regardless of the amount of advanced standing allowed, the baccalaureate degree will not be conferred until the student shall have satisfied the full requirements of the curriculum elected.
- (3) If the character of the student's work in any subject is such as to create doubt as to the quality of that which preceded it elsewhere, the University reserves the right to revoke at any time any advanced standing credit allowed.
- (4) Credit will not be granted for more than one-fourth of the total credit value of those courses which were passed with the lowest passing grade of the college attended.
- (5) An applicant may request an examination for advanced standing in any subject, in keeping with the requirements prescribed by the University of Maryland.

#### UNCLASSIFIED STUDENTS

Applicants who are at least twenty-one years of age who have had insufficient preparation to be admitted to any of the four-year curricula may register, with the consent of the Director of Admissions, for such courses as they may appear fitted to take. The student is ineligible to matriculate for a degree, however, so long as he retains an unclassified status.

#### REQUIREMENT IN MILITARY INSTRUCTION

All male students, if citizens of the United States, whose bodily condition indicates that they are physically fit to perform military duty are required to take military training for a period of two years, as a prerequisite to graduation.

##### Graduation Requirements for Students Excused from Military Instruction and Physical Education

Students excused from basic military training or physical education without academic credit shall be required to take an equivalent number of credits in other subjects, so that the total credits required for a degree in any college shall not be less than 127 hours. The substitution must be approved by the dean of the college concerned.

#### REQUIREMENTS IN PHYSICAL EDUCATION FOR WOMEN

All women students whose bodily condition indicates that they are physically fit for exercise are required to take physical education for a period of two years, as a prerequisite to graduation.

## HEALTH SERVICE

### PHYSICAL EXAMINATIONS

As soon as possible after the opening of the fall semester, as a measure for protecting the general health, all students who enter the undergraduate colleges at College Park are given a physical examination. The examination of the men students is conducted by the University Physician in coöperation with the Physical Education and Military Departments.

The examination of women students is conducted by a woman physician in coöperation with the office of the Dean of Women and the office of Physical Education for Women. The woman physician has her offices in the Girls' Field House. She is available for consultation by all women students at hours to be arranged.

### INFIRMARY RULES

1. All undergraduate students may receive dispensary service and medical advice by reporting at the Infirmary during regular office hours established by the physician in charge.

Nurses' office hours 8 to 10 A. M. and 6 to 7 P. M.

Doctor will have office hour from 12 to 1 daily except Sundays.

Office hours on Sunday by appointment only.

2. A registered nurse is on duty at all hours at the Infirmary.

Between the hours of 2 and 4 in the afternoon, quiet hour is observed. During this time students are requested not to report except in case of an emergency.

3. Students not living in their own homes who need medical attention and who are unable to report to the Infirmary should call one of the University physicians. Such visits will be free of charge except in cases where additional visits are necessary. For such additional visits as may be necessary, the University physician will make his usual charge. But, if a student so desires, he may call a physician of his own choice and at his own expense.

4. Students not residing in their own homes may, upon the order of the University physician, be cared for in the Infirmary to the extent of the facilities available. Students who live off the campus will be charged a fee of two dollars a day.

5. The visiting hours are 4 to 5 and 7 to 8 p. m. daily. No visitor may see any patient until permission is granted by the nurse in charge.

6. Hospitalization is not available at the Infirmary for graduate students and employees. Dispensary service, however, is available for graduate students and employees who are injured in University service or University activities.

7. For employees of the University who handle food and milk, the University reserves the right to have its physician make physical examinations,



and such inspections of sanitary conditions in homes as in the opinion of the University physician, may be desirable.

8. Students living in the dormitories who are unable to attend classes because of illness or who are unable to report to the Infirmary should report to their dormitory matrons, who will notify the Infirmary immediately.

9. Students who are ill in their homes, fraternity houses, or dormitories and wish a medical excuse for classes missed during the time of illness must present written excuses from their physicians, parents, or house mothers. These excuses will be approved by the University physicians or nurse.

## REGULATIONS, GRADES, DEGREES

### REGULATION OF STUDIES

**Course Numbers.** Courses for undergraduates are designated by numbers 1—99; courses for advanced undergraduates and graduates, by numbers 100—199; and courses for graduates, by numbers 200—299.

The letter following the number of a course indicates the semester in which it is offered; thus, course 1f is offered in the first semester; 1s, in the second semester. The letter "y" indicates a full-year course. The number of hours' credit for each course is indicated by the arabic numeral in parentheses following the title of the course. No credit is allowed for a "y" course until it is completed.

**Schedule of Courses.** A semester time schedule of courses, giving days, hours, and rooms, is issued as a separate pamphlet at the beginning of each semester. Classes are scheduled beginning 8:20 A. M.

**Definition of Credit Unit.** The semester hour, which is the unit of credit in the University, is the equivalent of a subject pursued one period a week for one semester. Two or three periods of laboratory or field work are equivalent to one lecture or recitation period. The student is expected to devote three hours a week in classroom or laboratory or in outside preparation for each credit hour in any course.

**Number of Hours.** The normal student load is from 15 to 19 semester hours, according to curriculum and year. These variations are shown in the appropriate chapters in Section II describing the several divisions of the University. No student may carry either more or less than the prescribed number of hours without specific permission from the dean of his college.

### EXAMINATIONS AND GRADES

**Examinations.** Examinations are held at the end of each semester in accordance with the official schedule of examinations. Students are required to use the prescribed type of examination book in final examinations; and in tests, when requested to do so by the instructor.

Final examinations are held in all courses except in classes where the

character of the work will permit the instructor to note frequently the progress and proficiency of the student—in which case they may be omitted upon approval of the head of the department and dean of the college. Periodic examinations and tests are given during regularly scheduled class periods. Final examinations, where required, are given according to schedule and are of not more than three hours' duration each.

**Grading.** The system of grading is uniform in the different departments and divisions of the University.

The following grade symbols are used: A, B, C, D, E, F, and I. The first four, A, B, C, and D, are passing; E, condition; F, failure; I, incomplete.

Grade A denotes superior scholarship; grade B, good scholarship; grade C, fair scholarship; and grade D, passing scholarship.

A student who receives the grade D in more than one-fourth of the credits required for graduation must take additional courses or repeat courses until he has the required number of credits for a degree, three-fourths of which carry a grade above D. A student is not permitted to repeat a course to raise a D grade after a lapse of two years.

In the case of a candidate for a combined degree or of a transfer student with advanced standing, a grade of D will not be recognized for credit towards a degree in more than one-fourth of the credits earned at this institution.

A student with the grade of E is conditioned in the course. The grade of E will be changed by a reexamination during the succeeding semester to D or F. The grade cannot be raised to a grade higher than D. Only one reexamination is permitted, and if a student does not remove the condition at the time scheduled for this reexamination the condition becomes a failure. No student is permitted to take a reexamination to remove a condition within four weeks after the condition has been acquired.

The mark I (Incomplete) is exceptional, and is given only to a student whose work has been qualitatively satisfactory and who has a proper excuse for not having completed the requirements of the course. In case of a student whose work has been unsatisfactory and who is absent from the final examination, the grade will be E or F, in accordance with the character of the previous work. In cases where the mark I is given the student must complete the work assigned by the instructor by the end of the first semester in which that subject is again offered, or the grade becomes F.

Work of grade D, or of any passing grade, cannot be raised to a higher grade except by repeating the course. This must be done within a period of two years after the course was originally taken. A student who repeats a course for which he has received credit for work done at this University or elsewhere, must meet all the requirements of the course, including regular attendance, laboratory work, and examinations. His final grade will be substituted for the grade already recorded, but he will not receive any additional credit for the course.



## REPORTS

Written reports of grades are sent by the Registrar to parents or guardians at the close of each semester.

### ELIMINATION OF DELINQUENT STUDENTS

The University reserves the right to request at any time the withdrawal of a student who cannot or does not maintain the required standard of scholarship, or whose continuance in the University would be detrimental to his or her health, or to the health of others, or whose conduct is not satisfactory to the authorities of the University. *Students of the last class may be asked to withdraw even though no specific charge be made against them.*

### JUNIOR STANDING

No student will be certified as a junior, or be permitted to select a major or minor, or to continue in a fixed curriculum until he or she shall have passed with an average grade of C the minimum number of semester credits required for junior standing in any curriculum. (This regulation is effective beginning with the class entering in September, 1935.)

### DEGREES AND CERTIFICATES

The University confers the following degrees: Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, Doctor of Philosophy, Civil Engineer, Mechanical Engineer, Electrical Engineer, Bachelor of Laws, Doctor of Medicine, Doctor of Dental Surgery, and Bachelor of Science in Pharmacy.

Students in the two-year and three-year curricula are awarded certificates.

The requirements for graduation vary according to the character of work in the different colleges and schools. For full information regarding the requirements for graduation in the several colleges consult the appropriate chapters in Section II.

No baccalaureate degree will be awarded to a student who has had less than one year of resident work in this University. The last thirty credits of any curriculum leading to a baccalaureate degree must be taken in residence at the University of Maryland.

At least three-fourths of the credits required for graduation must be earned with grades of A, B, and C.

In the case of a candidate for a combined degree or of a transfer student with advanced standing, a grade of D will not be recognized for credit towards a degree in more than one-fourth of the credits earned at this institution.

Each candidate for a degree must file in the office of the Registrar before March 1st of the year in which he expects to graduate, a formal application for a degree.

## EXPENSES

MAKE ALL CHECKS PAYABLE TO THE UNIVERSITY OF MARYLAND FOR THE EXACT AMOUNT OF THE SEMESTER CHARGES.

In order that the cost of operation may be reduced, all fees are due and payable as a part of the student's registration, and all persons must come prepared to pay the full amount of the semester charges. No student will be admitted to classes until such payment has been made.

### EXPENSES AT COLLEGE PARK

The University reserves the right to make such changes in fees and other costs as any occasion may make necessary. Such changes, however, in comparison with the total cost to the student would be only nominal.

### FEES FOR UNDERGRADUATE STUDENTS

Maryland			
	First Semester	Second Semester	Total
Fixed Charges .....	\$67.50	\$67.50	\$135.00 —
Athletic Fee .....	15.00	.....	15.00
*Special Fee .....	10.00	.....	10.00
**Student Activities Fee.....	10.00	.....	10.00
Infirmary Fee .....	3.00	.....	3.00
Post Office Box.....	2.00	.....	2.00
	<u>\$107.50</u>	<u>\$67.50</u>	<u>\$175.00</u> —
District of Columbia			
	First Semester	Second Semester	Total
General Fees listed above.....	\$107.50	\$67.50	\$175.00
Non-Resident Fee .....	25.00	25.00	50.00 —
	<u>\$132.50</u>	<u>\$92.50</u>	<u>\$225.00</u>
Other States and Countries			
	First Semester	Second Semester	Total
General Fee .....	\$107.50	\$ 67.50	\$175.00
Non-Resident Fee .....	62.50	62.50	125.00
	<u>\$170.00</u>	<u>\$130.00</u>	<u>\$300.00</u>

\* This fee, established by special request of the Student Government Association for a period of eight years, beginning Sept. 1, 1930, was for the purpose of further improving the University grounds and the physical training facilities. The income now being derived from it is used to amortize bonds issued by the Athletic Board for the purpose of constructing Ritchie Coliseum.

\*\* The Student Activities Fee is included at the request of the Student Government Association. Its payment is not mandatory, but it is really a matter of economy to the student, since it covers subscription to the student weekly paper, the literary magazine, and the year book; class dues, including admission to class dances; and admission to the performances of the musical and dramatic clubs.



### Special Fees

Matriculation Fee, payable on first entrance.....	\$ 5.00
Diploma Fee for bachelor's degree.....	10.00
Certificate Fee for Teacher's Diploma and other certificates where required each .....	5.00
Pre-Medical and Pre-Dental Fee—Per semester in addition to fees shown above:	
Maryland .....	\$25.00
District of Columbia.....	25.00
Other States and Countries.....	62.50

### Expenses of Students Living in Dormitories

	First Semester	Second Semester	Total
Board .....	\$135.00	\$135.00	\$270.00
Lodging .....	38.00	38.00	76.00
	<u>\$173.00</u>	<u>\$173.00</u>	<u>\$346.00</u>

### Laboratory Fees Per Semester Course

Bacteriology	Experimental Psychology.....	\$2.00
General, Pathological Technic, Hematology, and Urinalysis .....	Home Economics	
Pathogenic and Serology.....	Elementary Foods, Demonstrations, Problems and Practice in Foods, Advanced Foods, Advanced Experimental Foods .....	\$6.00
All other courses.....	Practice in Management of Home .....	\$3.50
Botany .....	Nutrition .....	\$3.00
Chemistry	Textiles and Clothing, Advanced Clothing, Problems and Practice in Textiles, Clothing or Related Art, Special Clothing Problems, Applied Art.....	\$2.00
Industrial, Inorganic, and Physical Chemistry .....	Introduction to Social Sciences .....	\$2.00
All other courses.....	Zoology .....	\$5.00
Dairy		
Introductory Dairy Science and Dairy Mechanics.....		\$2.00
Dairy Manufacturing, Market Milk, Analysis of Dairy Products, Grading Dairy Products, and Advanced Grading Dairy Products .....		\$3.00

### Miscellaneous Fees

Late Registration Fee.....	\$3.00-\$5.00
Fee for each change in registration after first week.....	\$1.00
Fee for failure to file schedule card in Registrar's Office during first week of semester.....	\$1.00

Absence Fee twenty-four hours before or after holiday.....	\$3.00
Condition Examination Fee.....	\$1.00
Special Examination Fee.....	\$5.00
Fee for failure to report for medical examination appointment.....	\$2.00
Part-time students carrying six semester hours or less—per semester credit hour .....	\$6.00
Laundry service, when desired—per semester.....	\$13.50
Transcript of Record Fee.....	\$1.00

Students will be charged for wilful damage to property. Where responsibility for the damage can be fixed, the individual student will be billed for it; where it cannot, the entire student body will be charged a flat fee to cover the loss or damage.

### Fees For Graduate Students

Matriculation Fee .....	\$10.00
Fee for each semester credit hour.....	4.00
Diploma Fee—Master's Degree.....	10.00
Graduation Fee—Doctor's Degree.....	20.00

### EXPLANATIONS

The Fixed Charges made to all students cover a part of the overhead expenses not provided for by the State.

The Board, Lodging, and Laundry charge may vary from semester to semester, but every effort will be made to keep expenses as low as possible.

Fees for Students Entering in February. Students entering the University for the second semester are charged the following fees for the items indicated: Athletic, \$7.50; Special, \$5.00; Student Activities, \$8.00; Infirmary, \$1.50, and Post Office Box, \$1.00.

Fees for Part-Time Students. Undergraduate students carrying six semester hours or less of regularly scheduled courses are charged \$6.00 per semester credit and regular laboratory fees. Students carrying seven or more semester hours are charged the regular fees. In the case of special courses with special fees this rule does not apply. A matriculation fee of \$5.00 is charged at the first registration.

The Athletic Fee constitutes a fund which is collected from all students in the University at College Park for the maintenance of athletics, and the entire amount is turned over to the Athletic Director for disbursement. This fund is audited annually by the State Auditors.

Late Registration Fee. Students who do not complete their registration and classification on regular registration days will be required to pay \$3.00 extra on the day following the last registration day, and \$5.00 thereafter. Students who fail to file course cards in the specified periods in May and January are considered late registrants.

18/173  
162  
110  
108  
22

9.61  
4 1/2  
480  
3844  
43.24 per mo.



**Absence Fee.** In cases of absence during a period beginning 24 hours before the close of classes for a vacation or holiday and ending 24 hours after the resumption of classes, a student will be penalized by being required to pay a special fee of \$3.00 for each class missed. Unless properly excused, students will be penalized, as in the case of a holiday, for absence from the first meeting of each class at the beginning of the second semester.

Students desiring to be excused from classes before and after a holiday must make application to the Dean at least one week before such holiday. Except under the conditions specified, no excuse for an absence before or after a holiday will be granted.

In exceptional cases, such as sickness or death in the family, application for an excuse must be made within one week after a student returns.

### DORMITORY RULES AND REGULATIONS

**Room Reservations.** All new students desiring to room in the dormitories should request room reservation cards. Men should apply to the Dormitory Manager; women should apply to the Dean of Women. When the room reservation card is returned, it must be accompanied by a \$5 deposit. This fee will be deducted from the first semester charges when the student registers; if he fails to register, the fee will be forfeited. Reservations by students already at the University may be made at any time during the closing month of the school year.

**Men's Dormitories.** The office of the Dormitory Manager is located in "A" Section, Calvert Hall. After the student has been officially admitted and has paid his bill, he will be able to receive his room key and take possession of his room. Instructions regarding rules for the dormitories will be given to the student at this time.

Students are requested to obtain their room assignments before 7 P. M. on the day they enter.

**Women's Dormitories.** All women students who have made dormitory reservations should report to the dormitory to which they have been assigned. Instructions regarding rules and regulations and any other information desired by the student will be given by the house mother on duty.

Personal baggage sent via the American Express and marked for the dormitory to which it is to be sent will be delivered there direct. All baggage coming by railway will be deposited at the railway station in College Park, whence it can be secured for a small charge through arrangements made at the General Service Department of the University.

**Keys.** A deposit of \$1.00 is required for each key. Each student is required to have a key for his room in the dormitory.

**Equipment.** Men students assigned to dormitories should provide themselves each with sufficient single blankets, at least two pairs of single sheets, a pillow, pillow cases, towels, a laundry bag, and a waste paper basket.

Women students should each bring single sheets, blankets, spread, pillow,

pillow cases, towels, bureau scarf, desk blotter, laundry bag, and waste paper basket.

All dormitory property assigned to the individual student will be charged against him, and he must assume responsibility for its possession without destruction other than that which may result from ordinary wear and tear.

Maid service is furnished without charge for all rooms.

All freshmen men students, except those who live at home, are required to room in the dormitories and board at the University dining hall.

Since there is not sufficient dormitory space for freshmen women, those who cannot be accommodated in the dormitories may live in approved off-campus houses.

### DEFINITION OF RESIDENCE AND NON-RESIDENCE

Students who are minors are considered to be resident students, if at the time of their registration their parents\* have been residents of this State† for at least one year.

Adult students are considered to be resident students, if at the time of their registration they have been residents of this State† for at least one year; provided such residence has not been acquired while attending any school or college in Maryland.

The status of the residence of a student is determined at the time of his first registration in the University, and may not thereafter be changed by him unless, in the case of a minor, his parents\* move to and become legal residents of this State†, by maintaining such residence for at least one full calendar year. However, the right of the student (minor) to change from a non-resident to a resident status must be established by him prior to registration for a semester in any academic year.

### MISCELLANEOUS INFORMATION

In case of illness requiring a special nurse or special medical attention, the expense must be borne by the student.

Students not rooming in the dormitories may obtain board and laundry at the University at the same rates as those living in the dormitories.

Day students may get lunches at the University cafeteria or at nearby lunch rooms.

The cost of books and supplies will vary according to the course pursued by the individual student. Books and supplies average about \$35.00 per year.

No diploma will be conferred upon, nor any certificate granted to a student who has not made satisfactory settlement of his account.

\* The term "parents" includes persons who, by reason of death or other unusual circumstances, have been legally constituted the guardians of and stand in loco parentis to such minor students.

† Students in the College Park Colleges who are residents of the District of Columbia are charged two-fifths of the non-resident fee charged to other non-residents.



## WITHDRAWALS

Students registering for the dormitories and dining hall must continue for the year, as contracts for faculty and other service and for supplies are made on an annual basis, and fees are fixed on the supposition that students will remain for the entire year.

A student desiring to withdraw from the University must secure the written consent of the parent or guardian, to be attached to the withdrawal slip, which must be approved by the Dean and presented to the Registrar at least one week in advance of withdrawal. Charges for full time will be continued against him unless this is done. The withdrawal slip must bear the approval of the President before being presented to the Cashier for refund.

## REFUNDS

For withdrawal within five days full refund is made of fixed charges, athletic fee, special fee, and student activities fee, with a deduction of \$5.00 to cover cost of registration. All refunds for board, lodging, and laundry are pro-rated.

After five days, and until November 1, the first semester, or March 10, the second semester, refunds on all charges will be pro-rated, with a deduction of \$5.00 to cover cost of registration.

After November 1, or March 10, refunds are granted for board and laundry only, amounts to be pro-rated.

No refunds are made without the written consent of the student's parent or guardian, except to students who pay their own expenses.

No student is given cash for any part of his or her refund until all outstanding checks have been honored by the banks on which they are drawn.

## EXPENSES AT BALTIMORE

The fees and expenses for the professional schools located in Baltimore will be found in the section of this catalogue pertaining to the several schools in Baltimore.

## STUDENT EMPLOYMENT

A considerable number of students earn some money through employment while in attendance at the University. No student should expect, however, to earn enough to pay all his expenses. The amounts vary, but some earn from one-fourth to three-fourths of all the required funds.

Generally the first year is the hardest for those desiring employment. After one has demonstrated that one is worthy and capable, there is much less difficulty in finding work.

During the past two and a half years, through the National Youth Administration, the University has been enabled to offer needy students a limited amount of work on special projects, the remuneration for which averages about \$15 monthly. It is not known how long the Government will continue to extend this aid.

The University assumes no responsibility in connection with employment. It does, however, maintain a bureau to aid needy students. The nearby towns and the University are canvassed, and a list of available positions is placed at the disposal of the students.

## HONORS AND AWARDS

### SCHOLARSHIP HONORS AND AWARDS

**Scholarship Honors.** Final honors for excellence in scholarship are awarded to one-fifth of the graduating class in each college. *First honors* are awarded to the upper half of this group; *second honors* to the lower half.

**The Goddard Medal.** The James Douglas Goddard Memorial Medal is awarded annually to the man from Prince George's County who makes the highest average in his studies and who at the same time embodies the most manly attributes. The medal is given by Mrs. Anne K. Goddard James, of Washington, D. C.

**Sigma Phi Sigma Medal.** The Delta Chapter of Sigma Phi Sigma Fraternity offers annually a gold medal to the freshman who makes the highest scholastic average during the first semester.

**Alpha Zeta Medal.** The Honorary Agricultural Fraternity of Alpha Zeta awards annually a medal to the agricultural student in the freshman class who attains the highest average record in academic work. The mere presentation of the medal does not elect the student to the fraternity, but simply indicates recognition of high scholarship.

**Dinah Berman Memorial Medal.** The Dinah Berman Memorial Medal is awarded annually to the sophomore who has attained the highest scholastic average of his class in the College of Engineering. The medal is given by Benjamin Berman.

**Mortar Board Cup.** Offered to the woman member of the senior class who has been in attendance at least three full years, and who has made the highest scholastic average.

**Delta Delta Delta Medal.** The sorority awards a medal annually to the girl who attains the highest average in academic work during the sophomore year.

**American Institute of Chemists Medal.** The American Institute of Chemists awards annually a medal and a junior membership to the graduating student, of good character and personality, majoring in chemistry, who shall have attained the highest average grade in this major subject for the entire undergraduate course, exclusive of credit received for the final semester.

### MILITARY AWARDS

**The Governor's Cup.** Offered each year by His Excellency, the Governor of Maryland, to the best drilled company.



**Military Faculty Award.** The Military faculty of the University presents an award to the student who has done most for the Reserve Officers' Training Corps.

**Class of '99 Gold Medal.** The Class of 1899 offers each year a gold medal to the member of the battalion who proves himself the best drilled soldier.

**Company Saber.** The Military Department awards annually to the captain of the best drilled company of the University a silver mounted saber.

**The Alumni Cup.** The Alumni offer each year a cup to the commanding officer of the best drilled platoon.

**Scabbard and Blade Saber.** This saber is offered for the commander of the winning platoon.

**Scabbard and Blade Medals.** These medals are offered for the freshman students who remain longest in the individual competition, one per battalion.

**Gold Medals.** Offered by the Military Department to the two students who contribute the most to the success of the band. Gold Medals are offered also to the members of the best drilled squad. Gold Medals are likewise presented by the Department to the respective battalion commanders.

**A Silver Medal** is presented by the Military Department to the student who makes the highest score in the Third Corps Area Match.

**A Bronze Medal** is similarly awarded to the student making the second highest score in the Third Corps Area Match.

**A Gold Medal** is awarded to the member of the Varsity R. O. T. C. Rifle Team who fired the high score of the season.

**A Gold Medal** is awarded to the member of the Freshman Rifle Team who fired the high score of the season.

### LOANS

**The Kappa Kappa Gamma Sorority** offers annually a Sigma Delta loan of one hundred dollars, without interest, to a woman student registered in the University of Maryland and selected by the Scholarship Committee—the said Committee to be composed of the deans of all Colleges in which girls are registered, including the Dean of Women and the Dean of the Graduate School.

**A. A. U. W. Loan.** The College Park Branch of the American Association of University Women offers annually a loan of one hundred dollars to a woman student of junior or senior standing who has been in attendance at the University of Maryland for at least one year. Awards are made on the basis of scholarship, character, and financial need. Applications should be made to the Scholarship Committee of the A. A. U. W.

### PUBLICATIONS AWARDS

Medals are offered in Diamondback, Terrapin, and Old Line work, for the students who have given most efficient and faithful service throughout the year.

### ATHLETIC AWARDS

**Silvester Watch for Excellence in Athletics.** The Class of 1908 offers annually to "the man who typified the best in college athletics" a gold watch. The watch is given in honor of a former President of the University, R. W. Silvester.

**Maryland Ring.** The Maryland Ring is offered by Charles L. Linhardt to the Maryland man who is adjudged the best athlete of the year.

### CITIZENSHIP AWARDS

**Citizenship Prize for Men.** A gold watch is presented annually by H. C. Byrd, a graduate of the Class of 1908, to the member of the senior class who, during his collegiate career, has most nearly typified the model citizen, and has done most for the general advancement of the interests of the University.

**Citizenship Prize for Women.** The Citizenship Prize is offered by Mrs. Albert F. Woods to the woman member of the senior class who, during her collegiate career, has most nearly typified the model citizen, and has done most for the general advancement of the interests of the University.

### STUDENT ACTIVITIES

The following description of student activities covers those of the undergraduate divisions of College Park. The description of those in the Baltimore divisions is included in the appropriate chapters in Section II.

### GOVERNMENT

**Regulation of Student Activities.** The association of students in organized bodies, for the purpose of carrying on voluntary student activities in orderly and productive ways, is recognized and encouraged. All organized student activities are under the supervision of the Student Life Committee, subject to the approval of the President. Such organizations are formed only with the consent of the Student Life Committee and the approval of the President. Without such consent and approval no student organization which in any way represents the University before the public, or which purports to be a University organization or an organization of University students, may use the name of the University in connection with its own name, or in connection with its members as students.

**Student Government.** The Student Government Association consists of the Executive Council, the Women's League, and the Men's League, and operates under its own constitution. Its officers are a President, a Vice-President, a Secretary-Treasurer, President of Women's League and President of Men's League.

The Women's League handles all affairs concerning women students exclusively. It has the advisory coöperation of the Dean of Women.

The Men's League handles all matters pertaining to men students. It has the advisory coöperation of the Assistant in Student Activities.



The Executive Council performs the executive duties incident to managing student affairs, and works in coöperation with the Student Life Committee.

The Student Life Committee, a faculty committee appointed by the President, keeps in close touch with all activities and conditions, excepting classroom work, that affect the student, and, acting in an advisory capacity, endeavors to improve any unsatisfactory conditions that may exist.

A pamphlet entitled *Academic Regulations*, issued annually and distributed to the students in the fall, contains full information concerning student matters as well as a statement of the rules of the University.

**Eligibility to Represent the University.** Only students in good standing are eligible to represent the University in extra-curricular contests. No student while on probation may represent the University in such events as athletic contests, glee club concerts, dramatic performances, and debates.

**Discipline.** In the government of the University, the President and faculty rely chiefly upon the sense of responsibility of the students. The student who pursues his studies diligently, attends classes regularly, lives honorably, and maintains good behavior meets this responsibility. In the interest of the general welfare of the University, those who fail to maintain these standards are asked to withdraw. Students are under the direct supervision of the University only when on the campus, but they are responsible to the University for their conduct wherever they may be.

Fraternities and sororities, as well as all other clubs and organizations recognized by the University, are expected to conduct their social and financial activities in accordance with the rules of good conduct and upon sound business principles. Where such rules and principles are observed, individual members will profit by the experience of the whole group, and thereby become better fitted for their life's work after graduation. Rules governing the different activities will be found in the list of Academic Regulations.

### SOCIETIES

**Honorary Fraternities.** Honorary fraternities and societies in the University at College Park are organized to uphold scholastic and cultural standards in their respective fields. These are Phi Kappa Phi, a national honorary fraternity open to honor students, both men and women, in all branches of learning; Sigma Xi, scientific fraternity; Alpha Zeta, a national honorary agricultural fraternity recognizing scholarship and student leadership; Tau Beta Pi, a national honorary engineering fraternity; Omicron Delta Kappa, men's national honor society, recognizing conspicuous attainment in non-curricular activities and general leadership; Kappa Phi Kappa, a national educational fraternity; Beta Phi Theta, an honorary French fraternity; Sigma Delta Pi, a national honorary Spanish fraternity; Alpha Chi Sigma, a national honorary chemical fraternity; Scabbard and Blade, a national military society; Pershing Rifles, a national military society for basic course R. O. T. C. students; Pi Delta Epsilon, a national journalistic fraternity; Mortar Board, the national senior honor society for women;

*Omicron Nu*  
Alpha Lambda Delta, a national freshman women's honor society promoting scholarship; ~~Theta Gamma~~, a local Home Economics society; Alpha Psi Omega (Iota Chapter), national dramatic society; and ~~Chi Alpha~~, local women's journalistic fraternity.

**Fraternities and Sororities.** There are fourteen national fraternities, and six national sororities and one local sorority at College Park. These in the order of their establishment at the University are Kappa Alpha, Sigma Phi Sigma, Sigma Nu, Phi Sigma Kappa, Delta Sigma Phi, Alpha Gamma Rho, Theta Chi, Phi Alpha, Tau Epsilon Phi, Alpha Tau Omega, Phi Delta Theta, Lambda Chi Alpha, Alpha Lambda Tau, and Sigma Alpha Mu (national fraternities); and Alpha Omicron Pi, Kappa Delta, Kappa Kappa Gamma, Delta Delta Delta, Alpha Xi Delta, and Phi Sigma Sigma (national sororities); and Alpha Sigma (local sorority).

**Clubs and Societies.** Many clubs and societies, with literary, scientific, social, and other special objectives are maintained in the University. Some of these are purely student organizations; others are conducted jointly by students and members of the faculty. The list is as follows: Agricultural Council, Authorship Club, Bacteriological Society, Engineering Society, Entomological Society, Horticulture Club, Latin American Club, Live Stock Club, New Mercer Literary Society, Poe Literary Society, Calvert Forum, Women's Athletic Association, Girls' "M" Club, Footlight Club, Debating Club, Rossbourg Club, Mathematics Society, Economics Club, Chess Club, Strauss Club, DeMolay Club, Psyche Club, Der Deutsche Verein, Riding Club, Swimming Club, Opera Club, Poetry Club, International Relations, American Institute of Electrical Engineers, American Society of Civil Engineers, Radio Club, and Camera Club. *alpha Sigma, Kappa Alpha Sigma*

**Student Grange.** The Student Grange is a chapter of the National Grange. With the exception of two faculty advisers, the Student Grange membership is made up entirely from the student body. New members are elected by ballot when they have proved their fitness for the organization.

The general purposes of the Student Grange are to furnish a means through which students keep in touch with state and national problems of agricultural, economic, or general educational nature; to gain experience in putting into practice parliamentary rules; to learn the meaning of leadership, and to learn how to assume leadership that aids in the ultimate task of serving in one's community.

### RELIGIOUS INFLUENCES

**Staff.** The University recognizes its responsibility for the welfare of the students not solely in their intellectual growth, but as human personalities whose development along all lines, including the moral and religious, is included in the educational process. Pastors representing the major denominational bodies are officially appointed by the Churches for work with the students of their respective faiths. Each of the Student Pastors also serves a local church of his denomination, which the students are urged to attend.



**Committee on Religious Affairs and Social Service.** A faculty committee on Religious Affairs and Social Service has as its principal function the stimulation of religious thought and activity on the campus. It brings noted speakers on religious subjects to the campus from time to time. The committee coöperates with the student pastors in visiting the students, and assists the student denominational clubs in every way that it can. Opportunities are provided for students to consult with pastors representing the denominations of their choice.

While there is no attempt to interfere with anyone's religious beliefs, the importance of religion is recognized officially and religious activities are encouraged.

**Denominational Clubs.** Several religious clubs, each representing a denominational group, have been organized among the students for their mutual benefit and to undertake certain types of Christian service. This year the list includes the Baptist Club, the Episcopal Club, the Lutheran Club, the Newman Club, and the Presbyterian Club. These clubs meet monthly or semi-monthly for worship and discussion, and occasionally for social purposes. A pastor or a member of the faculty serves as adviser. A local Y. W. C. A. provides a variety of activities and services on an undenominational basis.

#### STUDENT PUBLICATIONS

Three student publications are conducted under the supervision of the Faculty Committee on Student Publications.

**The Diamondback**, a weekly, six-to-eight-page newspaper, is published by the students. This publication summarizes the University news, and provides a medium for discussion of matters of interest to the students and the faculty.

**The Terrapin** is the student annual published by the Junior Class. It is a reflection of student activities, serving to commemorate the principal events of the college year.

**The Old Line** is a comic magazine put out quarterly by the students.

#### ALUMNI

The alumni are organized into several units, which elect representatives to the Alumni Council, an incorporated body which manages all general alumni affairs. Different alumni units represent the School of Medicine, the School of Pharmacy, the School of Dentistry, the School of Law, and the School of Nursing, while the group of colleges at College Park are represented by one unit. This College Park unit is governed by a board made up of representatives of the various colleges located at College Park.

The Alumni Council is made up of elected representatives from the several units, with a membership of twenty-four. Each alumni unit in Baltimore elects two representatives to the Council; the alumni representing the College Park group of colleges elect twelve representatives.

## SECTION II

### Administrative Divisions

#### COLLEGE OF AGRICULTURE

HARRY J. PATTERSON, *Dean*

Agriculture is the primary pursuit of the human race, and permanent prosperity is in direct proportion to the producing capacity of the land. Land-Grant Colleges were founded to foster teaching of scientific agriculture.

The College of Agriculture has a two-fold purpose. On the one hand, it gives a liberal educational background in order that its graduates may live more satisfying lives, no matter what may be their eventual occupations. On the other hand, it trains men and women for the various occupations based upon those sciences which are fundamental to agriculture. With this training, some will find occupation as scientific specialists, others will engage in business and professional pursuits having close agricultural contacts, while others will take up practical farming.

Agriculture is constantly changing; no cropping system can be worked out once and for all time; new as well as old pests and diseases must be constantly combated; better feeding and breeding of live stock, and efficient marketing methods must be substituted for inefficient methods if agriculture is to maintain its position with the other industries. Above all, agriculture must be made profitable to the tiller of the soil, and must be established as a paying business for those who engage in it.

The curricula of the College of Agriculture are planned to give the student thorough and practical instruction in agriculture and related sciences, and at the same time afford him an opportunity to specialize along the lines in which he is particularly interested.

#### Departments

The College of Agriculture includes the following departments: Agricultural Economics; Agronomy (including Crops and Soils); Animal Husbandry; Bacteriology; Botany; Dairy Husbandry; Entomology and Bee Culture; Farm Forestry; Farm Management; Farm Mechanics; Genetics and Statistics; Horticulture (including Pomology, Vegetable Gardening, Landscape Gardening, and Floriculture); Plant Pathology; Plant Physiology and Bio-chemistry; Poultry Husbandry.

#### Admission

The requirements for admission are discussed under Entrance, in Section I.



### Requirements for Graduation

One hundred and twenty-eight semester hours are required for graduation. The detailed requirements for each department are included in the discussion of Curricula in Agriculture.

### Farm and Laboratory Practice

The head of each department will help to make available opportunities for practical or technical experience along his major line of study for each student whose major is in that department and who is in need of such experience. For inexperienced students in many departments this need may be met by one or more summers spent on a practical farm.

### Student Organizations

The students of the College of Agriculture maintain a Student Grange, an Agricultural Council, a Bacteriological Society, an Entomological Society, a Horticulture Club, a Livestock Club, and an honor fraternity, Alpha Zeta.

Membership and work in these is voluntary, and no college credits are given for work done in them; yet much of the training obtained in them is fully as valuable as that acquired from regularly prescribed courses.

The Student Grange represents the Great National Farmers' fraternity of the Order of Patrons of Husbandry, and emphasizes training for rural leadership. It sponsors much deputation work in local granges throughout the State. The Horticulture Club sponsors the Horticulture Show in the fall, and the Livestock Club, the Fitting and Showing Contest in the spring. Both of these exhibitions are creditable University functions. They give valuable training and inspiration to the students.

### Alpha Zeta—National Agricultural Honor Fraternity

Membership in this fraternity is chosen from students in the College of Agriculture who have displayed agricultural motive and executive ability. This organization fosters scholarship, and to that end awards a gold medal to the member of the freshman class in agriculture who makes the highest record during the year.

### Fellowships

A limited number of graduate fellowships, which carry remuneration of \$400 to \$800 yearly, are available to graduate students. The holders of these fellowships spend a portion of their time assisting in classes and laboratories. The rest of the time is used for original investigation or assigned study. (See Graduate School.)

### Curricula in Agriculture

Curricula within the College of Agriculture divide into three general classes.

(1) Scientific curricula are designed to prepare students for positions as technicians, teachers, or investigators. These positions are usually in the various scientific and educational departments, or bureaus of the Federal,

State, or Municipal governments; in the various schools or experiment stations; or in the laboratories of private corporations.

(2) Technical curricula are designed to prepare students for farming as owners, tenants, managers, or specialists; for positions as county agricultural agents, or teachers of agriculture in high schools; as executives, salesmen, or other employees in commercial businesses with close agricultural contact and point of view.

(3) Courses of study may be arranged for any who desire to return to the farm after one or more years of training in practical agricultural subjects. (For details see Special Students in Agriculture, page 86.)

To be eligible to enter those courses ordinarily carried in the junior year, a regular student enrolled in the College of Agriculture must have an average grade as high as C.

### Student Advisers

Each freshman in the College of Agriculture is assigned to an adviser from the faculty, who is selected with due consideration for the major line of interest of the student. Not more than five or six students are assigned to any one person. With the advice and consent of his adviser and the Dean, any student may make such modifications in his curriculum as are deemed advisable to meet the requirements of his particular case.

The suggested curricula in the catalogue include a sufficient number of electives to afford opportunity for those who so desire to select major and minor fields of study from different departments. As an illustration, a student may decide to have his major in entomology and yet may want to be well informed in pomology. In the entomology curriculum (see page 79) there is room for 26 semester credit hours, distributed through the last two years, which may be elected from courses in, or associated with pomology.

### General Curriculum

	Semester	
	I	II
<i>Freshman Year</i>		
General Chemistry (Chem. 1y).....	4	4
Survey and Composition I (Eng. 1 y).....	3	3
Basic R. O. T. C. (M. I. 1 y) or Physical Education (Phys. Ed. 1 y or Phys. Ed. 2 y and 4 y).....	1	1
Reading and Speaking (Speech 1y).....	1	1
Elect one from each of the following groups:		
0 Biology (Bot. 1f or s and Zool. 1s).....	4	4
1 Botany (Bot. 1f and 2 s).....		
3 Mathematics (Math. 11f and 14s).....		
1-7 Modern Language (French 1y or German 1y).....	3	3
4 Entomology (Ent. 1f and 3 s).....		
5 Agriculture (A. H. 1f and D. H. 2s, or A. H. 2s).....		
or (Agron. 1f and 2 s).....		
or (Hort. 1f and 11 s).....		



<i>Sophomore Year</i>		<i>Semester</i>	
		<i>I</i>	<i>II</i>
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....		2	2

Elect one of the following:

Chemistry (Chem. 12Ay and 12Bf or s).....	}	4-3	2-3
6 Economics (A. E. 1f and Econ. 5 s).....			

Elect three or four of the following:

7 Mathematics (Math. 16y).....	3-3	}	10-12	11-12
7 Physics (Phys. 1y).....	4-4			
5 Geology and Soils (Geol. 1f and Soils 1 s).....	3-5			
5 Agriculture (Any freshman elective, Poultry 1 s, or D. H. 1f or s.).....				

0. Required of all students except those whose major is Botany.
1. Required of students whose major is Botany.
3. Required of students whose major is Biological Chemistry, Bacteriology, or Landscape Gardening.
4. Required of students whose major is Entomology.
5. Recommended for students who contemplate farming or employment in industries closely associated with farming. D. H. 1 required of all students whose major is Dairying.
6. Required of students whose major is Agricultural Economics.
- 3 and 7. Recommended for students who are interested in biological science and Dairy Manufacturing, and are likely to pursue graduate studies.

(See special curricula for Agricultural Education, Bacteriology, Botany, Dairy Manufacturing, Entomology, Floriculture, Landscape Gardening, Olericulture, and Pomology.)

### BIOLOGICAL CHEMISTRY

The objective of the curriculum in Biological Chemistry is the fitting of students for work in agricultural experiment stations, and in soil, fertilizer, and food laboratories.

### AGRICULTURAL EDUCATION

The objectives of the curricula in Agricultural Education are the teaching of secondary vocational agriculture, the work of county agents, and allied lines of the rural education service.

(For special requirements and curricula see page 121, College of Education.)

### AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

The courses in this department are designed to give students fundamental training in the basic economic principles underlying the agricultural

industry. Training in both agricultural economics and farm management is included in the curriculum.

Agricultural economics considers the fundamental principles underlying the production, distribution, and consumption of farm products. The most efficient and economical use of the factors of production—land, labor, and capital—are emphasized. Farm resources and tax revenues, and methods of financing agricultural production from both public and private points of view, are considered. The cost of getting products from the producer to the consumer through coöperative and private types of organization, the agencies involved and services rendered, are also included, since the farmer's work does not end with producing crops, animals, and animal products. Economical distribution and the return of a fair proportion of the selling price are as important factors in farming as economical production.

The purpose of the study of farm management is to enable the individual farmer so to organize his business that it may produce the greatest continuous profit. This can be done, however, only when the organization is in accordance with the broader principles of agricultural economics. It requires not only knowledge of many factors involved in the production of crops and animals, but also administrative ability to coördinate them into the most efficient farm organization. Farming is a business, as well as a way of life, and as such demands for its successful conduct the use of business methods. The aim of the courses in farm management is to train the student in the methods of keeping farm business records, analyzing the farm business, and organizing and operating the farm as a business enterprise. This enables the student to perceive the just relationship of the several factors of production and distribution as applicable to local conditions, and to develop in him an executive and administrative capacity.

Students well trained in agricultural economics and farm management are in demand for county agent work, farm bureau work, experiment station or United States Government investigation, and college or secondary school teaching.

<i>Junior Year</i>		<i>Semester</i>	
		<i>I</i>	<i>II</i>
Agricultural Economics (A. E. 2f).....	3	—	—
Marketing of Farm Products (A. E. 102 s).....	—	—	3
Analysis of the Farm Business (A. E. 107 s).....	—	—	3
Business Law (A. and F. 107y).....	3	3	3
Technology of Crop Quality (Agron. 102f).....	2	—	—
Statistics (Gen. 111f and 112 s).....	2	2	2
Expository Writing (Eng. 5f and 6 s).....	2	2	2
Electives .....	4	3	—
	—	—	—
	16	16	16



<i>Senior Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Coöperation in Agriculture (A. E. 103f).....	3	—
Transportation of Farm Products (A. E. 101 s).....	—	3
Seminar (A. E. 202y).....	1-2	1-2
Farm Organization and Operation (A. E. 108f).....	3	—
Farm Machinery (Agr. Engr. 101f).....	3	—
Agricultural Finance (A. E. 104 s).....	—	3
Rural Life and Education (R. Ed. 104 s).....	—	3
Money and Credit (Econ. 101f).....	2	—
Electives .....	4-3	6-5
	16	16

### AGRICULTURAL ENGINEERING

The department of Agricultural Engineering offers to students of agriculture training in those agricultural subjects which are based upon engineering principles. These subjects may be grouped under three heads: farm machinery, farm buildings, and farm drainage.

The modern tendency in farming is to reduce production costs by the use of farm machinery units of efficient size and design. In many cases horses are being replaced by tractors. Trucks, automobiles, and stationary engines are found on almost all farms. It is highly advisable that the student of any branch of agriculture have a working knowledge of the design, adjustments, and repair of these machines.

More than one-fourth of the total value of Maryland farms is represented by the buildings. The study of the design of various buildings, from the standpoint of economy, sanitation, efficiency, and appearance, is, therefore, important.

Studies included in the study of drainage are as follows: the principles of tile drainage, the laying out and construction of tile drain systems, the use of open ditches, and Maryland drainage laws.

### AGRONOMY

In the Department of Agronomy are grouped the courses in farm crops, soils, and plant breeding.

The curriculum in farm crops aims to give the student the fundamental principles of crop production. Special attempt is made to adapt the work to the young man who wishes to apply scientific principles of field crop culture and improvement on the farm. At the same time enough freedom is given the student in the way of electives so that he may register for subjects which might go along with the growing of crops on his particular farm. A student graduating from the course in agronomy should be well fitted for general farming, for the production of improved seeds, for employment with commercial firms, for investigational work in the State or Federal Experiment Stations, or for county agent work.

The division of soils gives instruction in the physics, chemistry, and biology of the soil, the courses being designed to equip the future farmer with a complete knowledge of his soil and also to give adequate training to students who desire to specialize in soils. Those who are preparing to take up research or teaching are expected to take graduate work in addition to the regular undergraduate courses that are offered. The division possesses the necessary equipment and facilities for the instruction in these subjects, and in addition affords opportunities for the student to come in contact with the research at the Agricultural Experiment Station, especially in the pot culture laboratories, and on the experimental fields at the station and in other parts of the State.

Graduate students will find unusual opportunities to fit themselves to teach soils in agricultural colleges, to conduct research in experiment stations, and to carry on work with the Bureau of Plant Industry and the Bureau of Chemistry and Soils, United States Department of Agriculture.

### Crops Division

<i>Junior Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Genetics (Gen. 101f).....	3	—
Technology of Crop Quality (Agron. 102f).....	2 or 3	—
General Bacteriology (Bact. 1f).....	4	—
Expository Writing (Eng. 5f and 6s).....	2	2
Plant Physiology (Plt. Phys. 101f).....	4	—
Fundamentals of Economics (Econ. 5s).....	—	3
Electives .....	1	11
	16	16

### *Senior Year*

Crop Breeding (Agron. 103f).....	2	—
Advanced Genetics (Gen. 102 s).....	—	2
Agricultural Economics (A. E. 2f).....	3	—
Methods of Crop and Soil Investigations (Agron. 121 s).....	—	2
Selected Crop Studies (Agron. 104f and s).....	1	4
Soil Geography (Soils 103f).....	3	—
Farm Drainage (Agr. Engr. 107 s).....	—	2
Farm Machinery (Agr. Engr. 101f).....	3	—
Farm Forestry (For. 1 s).....	—	3
Farm Management (F. M. 2f).....	4	—
Electives .....	—	3
	16	16



## Soils Division

	Semester	
	I	II
<i>Junior Year</i>		
Expository Writing (Eng. 5f and 6 s).....	2	2
Fundamentals of Economics (Econ. 5 s).....	—	3
General Bacteriology (Bact. 1f).....	4	—
Soils and Fertilizers (Soils 1f).....	5	—
Soil Management (Soils 102 s).....	—	3
Plant Physiology (Plt. Phys. 101f).....	4	—
Electives .....	1	8
	—	—
	16	16
<i>Senior Year</i>		
Agricultural Economics (A. E. 2f).....	3	—
Farm Management (F. M. 2f).....	4	—
Methods of Crop and Soil Investigations (Agron. 121 s).....	—	2
Soil Geography (Soils 103f).....	3	—
Farm Drainage (Agr. Engr. 107 s).....	—	2
Electives .....	6	12
	—	—
	16	16

## ANIMAL HUSBANDRY

The courses in animal husbandry are designed to furnish instruction in the essential principles and practices that are concerned in the breeding, feeding, management, judging, and marketing of horses, beef cattle, sheep, and swine. Attention is given to meat, to wool, and to by-products of the meat industry.

The curriculum in animal husbandry is so planned as to allow plenty of latitude in the selection of courses outside of the department, thus giving the student fundamental training and fitting him to become the owner or superintendent of general or specialized livestock farms.

Opportunity for specialization is offered to those who may desire to become instructors or investigators in the field of animal husbandry.

<i>Junior Year</i>		
Expository Writing (Eng. 5f and 6 s).....	2	2
General Bacteriology (Bact. 1f or s).....	4	—
Fundamentals of Economics (Econ. 5 s).....	—	3
Feeds and Feeding (A. H. 101f).....	3	—
Principles of Breeding (A. H. 102 s).....	—	3
Animal Hygiene (Bact. 106 s).....	—	3
Genetics (Gen. 101f).....	3	—
Advanced Livestock Judging (A. H. 105f and 106 s).....	2	2
Electives .....	2	3
	—	—
	16	16

	Semester	
	I	II
<i>Senior Year</i>		
Agricultural Economics (A. E. 2f).....	3	—
Farm Machinery (Agr. Engr. 101f).....	3	—
Animal Nutrition (A. H. 109 s).....	—	3
Livestock Management (A. H. 103f).....	3	—
Livestock Management (A. H. 104f).....	3	—
General Physiological Chemistry (Chem. 108 s).....	—	4
Electives .....	4	9
	—	—
	16	16

## BACTERIOLOGY AND PATHOLOGY

The present organization of this department was brought about with two main purposes in view. The first is to give all students of the University an opportunity to obtain a general knowledge of this basic subject. The second purpose is to prepare students for bacteriological positions (including those of dairy, sanitary, food, and soil bacteriologists; and federal, state, and municipal bacteriologists); and for public health, research, and industrial positions.

<i>Sophomore Year</i>		
Elements of Organic Chemistry (Chem. 12y).....	3	3
German or French.....	3	3
General Bacteriology (Bact. 1f).....	4	—
Pathogenic Bacteriology (Bact. 2 s).....	—	4
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Electives .....	5	3
	—	—
	17	15

<i>Junior Year</i>		
Dairy Bacteriology (Bact. 101f).....	3	—
Sanitary Bacteriology (Bact. 112 s).....	—	3
Expository Writing (Eng. 5f and 6 s).....	2	2
Serology (Bact. 115f).....	4	—
Hematology (Bact. 103f).....	2	—
Advanced Methods (Bact. 122 s).....	—	2
Bacteriology Electives .....	—	3-5
Electives .....	5	6-4
	—	—
	16	16



<i>Senior Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Bacteriological Problems (Bact. 123 f and 124 s).....	2	3
Statistics (Gen. 111f).....	2	—
General Physiological Chemistry (Chem. 108 s).....	—	4
Research Methods (Bact. 121f).....	1	—
Advanced Bacteriology (Bact. 127f).....	2	—
Journal Club (Bact. 131f and 132 s).....	1	1
Bacteriology Electives .....	3-5	2-5
Electives .....	5-3	6-3
	—	—
	16	16

### BOTANY

The department of Botany offers three major lines of work: general botany and morphology, plant physiology, and plant pathology. The courses listed for the curricula in botany and morphology, and plant physiology, make a kind of skeleton of essentials, to which the student adds the individual requirements to make a complete four year course. In the junior and senior years botanical courses may be elected to fit the individual needs of the student and the particular line to which he is inclined. Both the junior and senior years also allow considerable freedom in the election of non-botanical courses, in order to round out a fairly broad cultural education and to satisfy the educational requirements for those who desire to qualify for high school teaching. The curriculum as outlined lays a good foundation for graduate work in any field of botanical science.

The curriculum offered in plant pathology is designed to give the student the fundamental principles of plant disease control and investigation. Trained plant pathologists find opportunities to do advisory, extension, and research work in the various agricultural colleges, experiment stations, and the United States Department of Agriculture, and also in numerous commercial concerns, such as seed companies, companies making spray materials, farmer coöperatives, etc. For the student who elects a major in plant pathology, the following suggested curriculum will also lay a strong foundation for the type of graduate work usually required for a successful career as a professional plant pathologist. The curriculum may be modified to meet individual needs.

### General Botany and Morphology, Physiology, and Pathology

<i>Freshman Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
General Botany (Bot. 1f and 2 s).....	4	4
General Chemistry (Chem. 1y).....	4	4
Survey and Composition I (Eng. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
Modern Language (French or German).....	3	3
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
	—	—
	16	16

### *Sophomore Year*

Diseases of Plants (Plt. Path. 1f).....	4	—
Local Flora (Bot. 4s).....	—	2
General Zoology (Zool. 1's).....	—	4
General Bacteriology (Bact. 1f).....	4	—
College Algebra (Math. 11f) and Analytic Geometry (Math. 14s)	3	3
Modern Language .....	3	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Electives .....	—	2
	—	—
	16	16

### General Botany and Morphology, and Plant Physiology

### *Junior Year*

Plant Physiology (Plt. Phys. 101f).....	4	—
General Physics (Phys. 1y).....	4	4
Plant Ecology (Plt. Phys. 102s).....	—	3
Electives .....	8	9
	—	—
	16	16

### *Senior Year*

Genetics (Gen. 101f) .....	3	—
Methods in Plant Histology (Bot. 107f).....	2	—
Botanical Electives (Maximum).....	5	12
Other Electives (Minimum).....	6	4
	—	—
	16	16



## Plant Pathology

	Semester	
	I	II
<i>Junior Year</i>		
Plant Physiology (Plt. Phys. 101f).....	4	—
General Physics (Phys. 1y).....	4	4
Introductory Entomology (Ent. 1s).....	—	3
Elements of Organic Chemistry (Chem. 12y).....	3	3
Mycology (Bot. 102f).....	4	—
Research Methods (Plt. Path. 103s).....	—	2
Methods in Plant Histology (Bot. 107f).....	2	—
Electives .....	—	3
	17	15
<i>Senior Year</i>		
Plant Ecology (Plt. Phys. 102s).....	—	3
Plant Anatomy (Bot. 101f).....	3	—
Genetics (Gen. 101f).....	3	—
Diseases of Fruits (Plt. Path. 101s) or Diseases of Garden and Field Crops (Plt. Path. 102s).....	—	2
Electives .....	10	11
	16	16

## DAIRY HUSBANDRY

The department of Dairy Husbandry offers courses in two major lines: dairy production and dairy manufacture. The curriculum in each of these is so arranged as to give the student an intimate knowledge of the science, and facility in the art of dairy husbandry practice. The dairy production option is organized to meet the specific requirements of students who are especially interested in the care, feeding, breeding, management, and improvement of dairy cattle and in the production and sale of market milk.

The option in dairy manufactures is planned to meet the particular demands of those interested in the processing and distribution of milk, in dairy plant operation, and in the manufacture and sale of butter, cheese, ice-cream, and other milk products.

The dairy herd and the dairy laboratories are available to students for instruction and for research. Excellent opportunity is, therefore, afforded to both advanced undergraduate and graduate students for original investigation and research. Graduates in the courses in dairy husbandry should be well qualified to become managers of dairy farms, teachers, and investigators in the State and Federal Agricultural Experiment Stations, or to enter the field of commercial dairying.

## Dairy Manufacturing

	Semester	
	I	II
<i>Sophomore Year</i>		
Elements of Organic Chemistry (Chem. 12y).....	3	3
Quantitative Analysis (Chem. 4f or s).....	—	4
General Bacteriology (Bact. 1f or s).....	4	—
Introductory Dairy Science (D. H. 1f or s).....	3	—
Fundamentals of Economics (Econ. 5f or s).....	—	3
R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y).....	2	2
Electives .....	4	4
	16	16
<i>Junior Year</i>		
Geography of Dairying (D. H. 100f).....	2	—
Dairy Bacteriology (Bact. 101f and 102s).....	3	3
Dairy Manufacturing (D. H. 105f and 106s).....	5	5
Grading Dairy Products (D. H. 109s).....	—	1
Dairy Mechanics (D. H. 111y).....	1	1
Expository Writing (Eng. 5f and 6s).....	2	2
Electives .....	3	4
	16	16
<i>Senior Year</i>		
Dairy Production (D. H. 101y).....	3	3
Market Milk (D. H. 107f).....	5	—
Analysis of Dairy Products (D. H. 108s).....	—	3
Dairy Accounting (D. H. 112s).....	—	1
Dairy Literature (D. H. 113f and D. H. 113s).....	1	1
Dairy Plant Experience (114f and 115s).....	3	1
Agricultural Economics (A. E. 2f).....	3	—
Electives .....	1	7
	16	16

## Dairy Production

<i>Junior Year</i>		
Expository Writing (Eng. 5f and 6 s).....	2	2
Fundamentals of Economics (Econ. 5 s).....	—	3
General Bacteriology (Bact. 1f or s).....	4	—
Dairy Production (D. H. 101y).....	3	3
Principles of Breeding (A. H. 102 s).....	—	3
Dairy Cattle Judging (D. H. 102 s).....	—	1
Feeds and Feeding (A. H. 101f).....	3	—
Farm Drainage (Agr. Engr. 107 s).....	—	2
Geography of Dairying (D. H. 100f).....	2	—
Electives .....	2	2
	16	16



<i>Senior Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Animal Nutrition (A. H. 109 s).....	—	3
Agricultural Economics (A. E. 2f).....	3	—
Market Milk (D. H. 107f).....	5	—
Dairy Bacteriology (Bact. 101f).....	3	—
Animal Hygiene (Bact. 106 s).....	—	3
Advanced Study of Dairy Breeds (D. H. 104 s).....	—	2
Electives .....	5	8
	16	16

### ENTOMOLOGY

This department is engaged in the teaching of entomology to all agricultural students as a basis for future work in pest control, in the preparation of technically trained entomologists, and in furnishing courses to students in Arts and Sciences and Education.

The success of the farmer and particularly the fruit grower is in large measure dependent upon his knowledge of the methods of preventing or combating the pests that menace his crops. Successful methods of control are emphasized in the economic courses.

The fact that the entomological work of the Experiment Station, the Extension Service, the College of Agriculture, and the office of the State Entomologist are in one administrative unit, enables the student in this department to avail himself of the many advantages accruing therefrom. Advanced students have special advantages in that they may be assigned to work on Station projects already under way. The department takes every advantage of the facilities offered by the Bureau of Entomology of the U. S. Department of Agriculture, the Beltsville Research Center, the National Museum, Smithsonian Institution, various other local laboratories, the libraries in Washington, and the Washington Entomological Society. There is an active Entomological Society composed of the students and staff of the department. A monthly news magazine is published, and there are numerous other profitable projects in which all students may participate. Thus students are given many opportunities of meeting authorities in the various fields of entomology, to observe projects under way, consult collections, and hear addresses on every phase of entomology. Following is the suggested curriculum in entomology. It can be modified to suit individual demand. Students not starting this curriculum in their freshman year can with a few changes in schedule meet the requirements in the four years.

<i>Freshman Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
General Chemistry (Chem. 1y).....	4	4
General Zoology (Zool. 1s).....	—	4
General Botany (Bot. 1f).....	4	—
Introductory Entomology (Ent. 1f).....	3	—
Insect Biology (Ent. 3s).....	—	3
Survey and Composition I (Eng. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
	16	16
<i>Sophomore Year</i>		
Elements of Organic Chemistry (Chem. 12y).....	3	3
College Algebra (Math. 11f).....	3	—
Analytic Geometry (Math. 14s).....	—	3
Survey and Composition II (Eng. 2f and 3s).....	3	3
French or German.....	3	3
Insect Morphology and Taxonomy (Ent. 2y).....	3	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
	17	17
<i>Junior Year</i>		
General Physics (Phys. 1y).....	4	4
French or German.....	3	3
*Economic Entomology (Ent. 101y).....	2	2
Diseases of Plants (Plt. Path. 1f).....	4	—
General Bacteriology (Bact. 1s).....	—	4
Electives .....	3	3
	16	16
<i>Senior Year</i>		
*Insect Pests of Special Groups (Ent. 104y).....	3	3
Seminar (Ent. 103y).....	1	1
Special Problems (Ent. 110f or s).....	2	2
Electives .....	10	10
	16	16

\* Ent. 101y and Ent. 104y taught in alternate years.



## GENERAL AGRICULTURE

Those who do not care to specialize in any particular phase of agriculture will pursue the following curriculum:

	Semester	
	I	II
<i>Junior Year</i>		
Diseases of Plants (Plt. Path. 1f).....	4	—
Plant Physiology (Plt. Phys. 101f).....	4	—
General Bacteriology (Bact. 1f).....	4	—
Expository Writing (Eng. 5f and 6 s).....	2	2
Farm Poultry (Poultry 1 s).....	—	3
Genetics (Gen. 101f).....	3	—
Farm Accounting (F. M. 1 s).....	—	3
Principles of Breeding (A. H. 102 s).....	—	3
Fundamentals of Economics (Econ. 5 s).....	—	3
Electives .....	—	2
	17	16
<i>Senior Year</i>		
Agricultural Economics (A. E. 2f).....	3	—
Farm Management (F. M. 2f).....	4	—
Farm Machinery (Agr. Engr. 101f).....	3	—
Gas Engines, Tractors, and Automobiles (Agr. Engr. 102 s).....	—	3
Farm Drainage (Agr. Engr. 107 s).....	—	2
Farm Forestry (For. 1 s).....	—	3
Electives .....	6	8
	16	16

## GENETICS AND STATISTICS

Rapid accumulation of knowledge in the field of genetics has changed the viewpoint of those interested in plant and animal breeding and in eugenics.

Teachers and investigators have increasing occasion to interpret statistical data presented by others, as well as to gather and organize original material.

The department of Genetics and Statistics offers students training in (1) the principles of heredity and genetics, and (2) the tools and methods employed in statistical description and induction.

## HORTICULTURE

There are several reasons why the State of Maryland should be pre-eminent in horticulture and offer excellent opportunities for horticultural enterprises. The more evident ones are the wide variation in soil and climate from the Eastern Shore to the mountains in the West, the nearness to many large Eastern markets, and the large number of railroads, inter-

urban lines, highways, and waterways, which combine to favor the growing of horticultural crops and to make marketing easy and comparatively cheap.

The department of Horticulture offers four major lines of work: pomology, olericulture, floriculture, and landscape gardening. Students wishing to specialize in horticulture may take a general course during the four years, or the student may specialize in any of the four divisions. The courses have been so planned that upon their completion students should be fitted to engage in commercial work, county agent work, or teaching and investigational work in State and Federal institutions.

On the University campus, the department has at its disposal ten acres of ground devoted to vegetable gardening, eighteen acres of orchards, small fruits, and vineyards, twelve greenhouses, in which research and teaching are conducted, and one building which is devoted to horticultural teaching and research. In addition, the department has acquired 250 acres of land, three miles from the college, which tract is used for experimental and teaching purposes. Members of the teaching staff are likewise members of the experiment station staff, hence students have an opportunity to become acquainted with the research being carried on in the department. Excellent opportunity for investigating new problems is afforded to advanced undergraduates and to graduate students.

Students who intend to specialize in Pomology, Olericulture, Floriculture, or Landscape Gardening are required to take courses of study which it is felt will best equip them for their future work in Horticulture.

The following curricula will be adjusted to the special needs of the student whose interests lie in the general scientific field or the one who is preparing for work in technical lines. The object is to fit students most effectively to fill positions of certain types, as noted above.

	Pomology—Olericulture—Floriculture	
	Semester I	Semester II
<i>Freshman Year</i>		
General Chemistry (Chem. 1y).....	4	4
Survey and Composition I (Eng. 1y).....	3	3
General Botany (Bot. 1f and 2s).....	4	4
College Algebra (Math. 11f); Analytic Geometry (Math. 14s)	3	3
Reading and Speaking (Speech 1y).....	1	1
Basic R.O.T.C. (M. I. 1y or 2y and 4y) or Physical Education (Phys. Ed. 1y).....	1	1
	16	16



	Semester	
	I	II
<i>Sophomore Year</i>		
Diseases of Plants (Plt. Path. 1f).....	4	—
Geology (Geol. 1f).....	3	—
Soils and Fertilizers (Soils 1s).....	—	5
Elements of Organic Chemistry (Chem. 12y).....	3	3
*Elementary Pomology (Hort. 1f).....	3	—
*Principles of Vegetable Culture (Hort. 11s).....	—	3
**General Landscape Gardening (Hort. 31s).....	—	2
Practical Pomology Lab. (Hort. 7f and 8s).....	2	2
Basic R.O.T.C. (M.I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Electives .....	—	0 or 2
	17	17

### Pomology

<i>Junior Year</i>		
Fundamentals of Economics (Econ. 5 s).....	—	3
†Small Fruit Culture (Hort. 4 s).....	—	2
Fruit Judging (Hort. 5f).....	2	—
†Systematic Pomology (Hort. 107f).....	3	—
Expository Writing (Eng. 5f and 6 s).....	2	2
Plant Physiology (Plt. Phys. 101f).....	4	—
Introductory Entomology (Ent. 1 s).....	—	3
Genetics (Gen. 101f).....	3	—
Electives .....	2	6
	16	16

### Senior Year

†Commercial Fruit Growing (Hort. 101f).....	3	—
†Economic Fruits of the World (Hort. 102 s).....	—	2
Horticultural Seminar (Hort. 43y).....	1	1
†General Landscape Gardening (Hort. 31 s).....	—	2
†General Floriculture (Hort. 21f).....	2	—
Farm Management (F. M. 2f).....	4	—
Horticultural Research and Thesis (Hort. 42y).....	2	2
Electives .....	4	9
	16	16

\*Required for students in pomology and olericulture.

\*\*Required for students in floriculture.

†Courses offered only in alternate years for juniors and seniors.

	Semester	
	I	II
<i>Junior Year</i>		
Fundamentals of Economics (Econ. 5 s).....	—	3
†Small Fruit Culture (Hort. 4 s).....	—	2
Plant Physiology (Plt. Phys. 101f).....	4	—
Genetics (Gen. 101f).....	3	—
Expository Writing (Eng. 5f and 6 s).....	2	2
†Truck Crop Production (Hort. 12f).....	3	—
Introductory Entomology (Ent. 1 s).....	—	3
Electives .....	4	6
	16	16

### Senior Year

Farm Management (F. M. 2f).....	4	—
†General Landscape Gardening (Hort. 31 s).....	—	2
†General Floriculture (Hort. 21f).....	2	—
†Tuber and Root Crops (Hort. 103f).....	2	—
†Systematic Olericulture (Hort. 105f).....	3	—
†Advanced Truck Crop Production (Hort. 104 s).....	—	2
Horticultural Research and Thesis (Hort. 42y).....	2	2
Horticultural Seminar (Hort. 43y).....	1	1
Electives .....	2	9
	16	16

### Floriculture

<i>Junior Year</i>		
*Greenhouse Management (Hort. 22y).....	3	3
Floricultural Practice (Hort. 23y).....	2	2
Floricultural Trip (Hort. 27 s).....	—	1
*Greenhouse Construction (Hort. 24 s).....	—	2
*Garden Flowers (Hort. 26f).....	3	—
Expository Writing (Eng. 5f and 6 s).....	2	2
Fundamentals of Economics (Econ. 5 s).....	—	3
Plant Physiology (Plt. Phys. 101f).....	4	—
Local Flora (Bot. 4 s).....	—	2
Elements of Landscape Design (Hort. 32f).....	3	—
Electives .....	—	1
	17	16

\*Courses taken by both sophomores and juniors in alternate years.  
†Courses offered only in alternate years for juniors and seniors.



<i>Senior Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
*Commercial Floriculture (Hort. 25y).....	3	3
Plant Materials (Hort. 106y).....	2	3
Agricultural Economics (A. E. 2f).....	3	—
Horticultural Seminar (Hort. 43y).....	1	1
Horticultural Research and Thesis (Hort. 42y).....	2	2
Electives .....	5	7
	16	16

#### Landscape Gardening

<i>Freshman Year</i>		
General Chemistry (Chem. 1y).....	4	4
General Zoology (Zool. 1 s).....	—	4
General Botany (Bot. 1f).....	4	—
Survey and Composition I (Eng. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
College Algebra (Math. 11f); Analytic Geometry (Math. 14 s)	3	3
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
	16	16

#### Sophomore Year

French or German.....	3	3
Diseases of Plants (Plt. Path. 1f).....	4	—
Geology (Geol. 1f).....	3	—
Soils and Fertilizers (Soils 1 s).....	—	3
Plane Surveying (Surv. 2y).....	2	3
*General Landscape Gardening (Hort. 31 s).....	—	2
Expository Writing (Eng. 5f and 6 s).....	2	2
Mechanical Drawing (Dr. 4y).....	1	1
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Electives .....	—	2
	17	17

\* Courses taken by both sophomores and juniors in alternate years.

<i>Junior Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Elementary Pomology (Hort. 1f).....	3	—
†Plant Materials (Hort. 106y).....	2	3
†History of Landscape Gardening (Hort. 35f).....	1	—
*Elements of Landscape Design (Hort. 32f).....	3	—
†Landscape Design (Hort. 33 s).....	—	3
†Garden Flowers (Hort. 26f).....	3	—
Fundamentals of Economics (Econ. 5 s).....	—	3
Plant Physiology (Plt. Phys. 101f).....	4	—
Local Flora (Bot. 4 s).....	—	2
Farm Drainage (Agr. Engr. 107 s).....	—	2
Electives .....	—	3
	16	16

#### Senior Year

†Landscape Design (Hort. 34f).....	3	—
†Landscape Construction and Maintenance (Hort. 36 s).....	—	1
†Civic Art (Hort. 37 s).....	—	2
Horticultural Research and Thesis (Hort. 42y).....	2	2
Horticultural Seminar (Hort. 43y).....	1	1
Electives .....	8	10
	14	16

#### POULTRY HUSBANDRY

The curriculum in poultry husbandry is designed to give the student a comprehensive view of the practices of poultry raising. Students who expect to become teachers, extension workers, or investigators should choose as electives such subjects as psychology, economic history, sociology, philosophy, and political science.

#### Junior Year

Poultry Production (Poultry 103 s).....	—	4
Expository Writing (Eng. 5f and 6 s).....	2	2
General Bacteriology (Bact. 1f).....	4	—
Pathogenic Bacteriology (Bact. 2 s).....	—	4
Genetics (Gen. 101f).....	3	—
Poultry Keeping (Poultry 102f).....	4	—
Fundamentals of Economics (Econ. 5 s).....	—	3
Electives .....	3	3
	16	16

\* Courses taken by both sophomores and juniors in alternate years.  
† Courses taken by both juniors and seniors in alternate years.



Senior Year	Semester	
	I	II
Agricultural Economics (A. E. 2f).....	3	—
Farm Management (F. M. 2f).....	4	—
Farm Accounting (F. M. 1 s).....	—	3
Animal Hygiene (Bact. 106 s).....	—	3
Poultry Breeds (Poultry 104f).....	4	—
Poultry Management (Poultry 105 s).....	—	4
Marketing of Farm Products (A. E. 102 s).....	—	3
Electives .....	5	3
	16	16

### COMBINED PROGRAM IN AGRICULTURE AND VETERINARY MEDICINE

By arrangement with the Veterinary School of the University of Pennsylvania, students who wish to specialize in veterinary medicine may pursue a combined six-year program of study. The first three years of this program are taken at College Park. The last three years are taken at the Veterinary School of the University of Pennsylvania. After successful completion of the three years' work at the University of Maryland and the first year's work at the University of Pennsylvania, the student receives his B. S. degree from the University of Maryland. After successful completion of the last two years' work at the University of Pennsylvania he receives his degree in Veterinary Medicine from the Veterinary School.

### SPECIAL STUDENTS IN AGRICULTURE

Mature students who are not candidates for degrees may, on consent of the dean, register as special students and pursue a program of studies not included in any regular curriculum, but arranged to meet the needs of the individual. In case such persons have not fulfilled the regular college entrance requirements, they may arrange to audit (to attend without "credit") certain of the agricultural classes. All university fees for these special students are the same as fees for regular students.

There are many young farmers who desire to take short intensive courses in their special lines of work during slack times on the farm. Arrangements have been made to permit such persons to register at the office of the Dean of the College of Agriculture and receive cards granting them permission to visit classes and work in the laboratories of the different departments. This opportunity is created to aid florists, poultrymen, fruit-growers, gardeners, or other especially interested persons who are able to get away from their work at some time during the year.

The regular charges are \*\$5.00 for registration and \$1.00 per week for the time of attendance.

\* One registration is good for any amount of regular or intermittent attendance during a period of four years.

## AGRICULTURAL EXPERIMENT STATION

HARRY J. PATTERSON, *Director*.

The agricultural work of the University naturally comprises three fields: research, instruction, and extension. The Agricultural Experiment Station is the agricultural research agency of the University, which has for its purpose the increase of knowledge relating to agriculture, primarily for the direct benefit of the farmer. It is also the real source of agricultural information for use in the classroom and for demonstrations in the field.

The Experiment Station work is supported by both State and Federal appropriations. The Hatch Act, passed by Congress in 1887, appropriates \$15,000 annually; the Adams Act, passed in 1906, provides \$15,000 annually; the Purnell Act, passed in 1925, provides \$60,000 annually, and the Bankhead-Jones Act, passed in 1935, provides, for 1936-1937, \$14,275.24. The State appropriation for 1937 was \$42,604.

The objects, purposes, and work of the Experiment Station as set forth by these acts are as follows:

"That it shall be the object and duty of said Experiment Stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States or Territories."

The Purnell Act also permits the appropriation to be used for conducting investigations and making experiments bearing on the manufacture, preparation, use, distribution, and marketing of agricultural products, and for such economic and sociological investigations as have for their purpose the development and improvement of the rural home and rural life.

The Maryland Station, in addition to the work conducted at the University, operates a sub-station farm of fifty acres at Ridgely, Caroline County, a farm of about sixty acres at Upper Marlboro for tobacco investigation, and a farm of 234 acres near Ellicott City for livestock. Experiments in coöperation with farmers are conducted at many different points in the



State. These tests consist of studies with soils, fertilizers, crops, orchards, insect and plant disease control, and stock feeding.

The results of the Experiment Station work during the past quarter of a century have developed a science of agriculture to teach, and have laid a substantial foundation for agricultural development. The placing of agricultural demonstrations and extension work on a national basis has been the direct outgrowth of the work of the Experiment Stations.

Students taking courses in agriculture are kept in close touch with the investigations in progress.

## EXTENSION SERVICE

T. B. SYMONS, *Director*.

The Extension Service is that branch of the University of Maryland, established by Federal and State law, which is designed to assist farmers and their families in promoting the prosperity and welfare of agriculture and rural life. Its work is conducted in co-operation with the United States Department of Agriculture.

The Extension Service is represented in each county of the State by a county agent and a home demonstration agent. Through these agents and its staff of specialists, it comes into intimate contact with rural people and with the problems of the farm and home.

Practically every phase of agriculture and rural home life comes within the scope of the work undertaken by the Extension Service. Farmers are supplied with details of crop and livestock production, and with instructions for controlling diseases and insect pests; they are encouraged and aided in organized effort, helped with marketing problems, and in every way possible assisted in improving economic conditions on the farm.

This service is charged with carrying out in Maryland the program of the Agricultural Adjustment Administration and coöperates in the programs of other Federal agencies.

Rural women are likewise assisted in the problems of the home. They are made acquainted with time- and labor-saving devices, with simpler and easier methods of work, with new knowledge of foods, with new ideas about home furnishing, with practical methods of home sewing and millinery construction, and with such other information as tends to make rural home life attractive and satisfying.

For rural boys and girls, the Extension Service provides a valuable type of instruction in agriculture and home economics through its 4-H Club work. Actual demonstrations conducted by the boys and girls themselves, under supervision of the county and home demonstration agents, are the best possible means of imparting to youthful minds valuable information in crop and livestock production and in the household arts. The 4-H Club work affords rural boys and girls a real opportunity to develop self-confidence, perseverance, and leadership.

The Extension Service works in accord with all other branches of the University of Maryland and with all agencies of the United States Department of Agriculture. It co-operates with all farm and community organizations in the State which have as their major object the improvement of agriculture and rural life; and it aids in every way possible in making effective the regulatory work and other measures instituted by the State Board of Agriculture.

The Extension Service is gradually developing activities in the general adult educational field.



## COLLEGE OF ARTS AND SCIENCES

T. H. TALIAFERRO, *Dean.*

The College of Arts and Sciences provides four years of liberal training in biological sciences, economics and finance, history, languages and literatures, mathematics, philosophy, physical sciences, political science, psychology, and sociology. It thus affords an opportunity to acquire a general education which shall serve as a foundation for success in whatever profession or vocation the student may choose. In particular it prepares the ground and lays the foundation for the learned professions of law, medicine, theology, and teaching, and even the more technical professions of engineering, public health service, and business administration. Through the aid which it furnishes other colleges of the University it aims to give the students of these colleges the outlook necessary for liberal culture and for public service.

### Divisions

The College of Arts and Sciences is divided into one Lower Division and three Upper Divisions. Under the latter are grouped the various departments as follows: (1) The Division of Humanities: Classical Languages, Comparative Literature, English Literature and Philology, Modern Languages, Music, Philosophy, and Speech; (2) The Division of Natural Sciences: Chemistry, Mathematics, Physics, Zoology, and associated departments in other colleges of the University such as Bacteriology, Botany, Entomology, and Geology; (3) The Division of Social Sciences: Business Administration, Economics, History, Political Science, Psychology, Sociology, and associated departments in other colleges.

These Upper Divisions direct the courses of study of students doing their major work in the College of Arts and Sciences, and designate general requirements, the fulfillment of which is necessary to qualify a student for admission to major work in each Upper Division.

### Degrees

The degrees conferred upon students who have met the prescribed conditions for degrees in the College of Arts and Sciences are Bachelor of Arts and Bachelor of Science.

Graduates of this college who have completed the regular course are awarded the degree of Bachelor of Arts, except that, upon request, any student who has met the requirements for that degree may be awarded the degree of Bachelor of Science, provided the major portion of the work has been done in the field of science, and the application has the approval of the department in science in which the major work has been carried. Students who have elected the combined program of Arts and Medicine may be

granted the degree of Bachelor of Science after the completion of at least three years of the work of this college and the first year of the School of Medicine. Those electing the combined five-year Academic and Nursing Course, for which the degree of Bachelor of Science may be awarded upon the completion of the full course, must take the Pre-Nursing curriculum at College Park before the Nursing Course in Baltimore. Those taking the combined course in Arts and Law may be awarded the Bachelor of Arts degree after the completion of three years of the work of this college and one year of full-time law course, or its equivalent, in the School of Law.

In the regular course and in all the combined programs the last thirty credit hours of courses in the Arts and Sciences must be completed in residence at College Park, or under members of the faculty of the College of Arts and Sciences.

### Requirements for Degrees

The baccalaureate degree from the College of Arts and Sciences may be conferred upon a student who has satisfied all entrance requirements and has secured a minimum of 120 semester credit hours not including the six credit hours of basic military science required of all able-bodied men students, or the six credit hours of physical education for women and for such men as are excused from military science. Of these 120 academic credits 60 are to be acquired in the Lower Division and 60 in the Upper Division.

A student must acquire at least fifty-eight semester credits, exclusive of military science and physical education, with an average grade of not less than C, in the Lower Division, before being admitted to an Upper Division. The average grade in subjects taken in the major department desired must be C or better.

At the beginning of the junior year, each student must select a major and a minor in a field specified in one of the three Upper Divisions, and before graduation must complete one major and one minor in that Division. The courses constituting the major and the minor must conform to the requirements of the department in which the major work is done. The average of work taken in the field must be at least C.

In addition to the special requirements of the Division and the major department, the student must satisfy the general requirements of the University. See pages 50-52. Attention is also called to the separate pamphlet entitled Academic Regulations.

### Requirements for Admission

The requirements for admission to the College of Arts and Sciences are in general the same as those for admission to the other colleges and schools of the University. See Section I, Entrance.

For admission to the pre-medical curriculum, two years of any one foreign language in addition to the regularly prescribed units are required. A



detailed statement of the requirements for admission to the School of Medicine and the relation of these to the pre-medical curriculum will be found under the heading School of Medicine.

#### Students With Advanced Standing

Students entering the junior year of the College of Arts and Sciences with advanced standing from other accredited universities or from other colleges of this university must meet the requirements of the first two years to the extent of their deficiencies in credits in Arts and Sciences. Scholarship requirements as outlined in Section I of this catalogue will apply to all courses offered for advanced standing.

#### Advisers

During the freshman and sophomore years each student is assigned to a member of the faculty who will act as his personal adviser, assisting him in the selection of his courses and the arrangement of his schedule, and in any other matters on which he may need assistance or advice. Students are expected to report to the advisers at periodic intervals for conferences.

For the junior and senior years the student shall consider the head of his major department his special adviser, and shall consult him about the arrangement of his schedule and any other matters in which he may need advice. The Chairman of the Upper Division in which the major has been selected shall determine each student's load, in conformity with the regulations of the Division.

#### Student Responsibility

*The individual student will be held responsible for the selection of the courses and the major in conformity with the regulations of the College of Arts and Sciences. The student will also be held responsible for a knowledge of the general Academic Regulations.*

#### Normal Load

The normal load for the freshman year is sixteen credit hours each semester. This includes one hour of basic military science or physical education.

The normal load for the sophomore year is seventeen credit hours per semester, two hours of which are military science or physical education.

In no case shall the load in the freshman and sophomore years exceed eighteen credit hours, except for sophomore students whose average grade is B or above for the preceding year at this university. With the approval of the Dean these honor students may be permitted to carry a maximum of nineteen credit hours.

The normal load in the junior and senior years shall be fifteen hours per semester. With the permission of the Chairman of the Division, the load

may be increased to seventeen hours, an absolute maximum except for honor students. The load of honor students shall lie within the discretion of the Division, but in no case shall it exceed nineteen hours.

#### Electives in Other Colleges and Schools

A limited number of courses may be counted for credit in the College of Arts and Sciences for work done in other colleges and schools of the University.

The number of semester hours accepted from the various colleges is as follows:

College of Agriculture—Fifteen.\*

College of Education—Twenty.

College of Engineering—Fifteen.

College of Home Economics—Fifteen.

School of Law—In the combined program the first year of law must be completed.

School of Medicine—In the combined program the first year of medicine must be completed.

School of Nursing—Three years in combined program.

#### THE LOWER DIVISION

The work of the first two years in the College of Arts and Sciences is designed to give the student a basic general education, and to prepare him for specialization in the junior and senior years.

It is the student's responsibility to develop in these earlier years such proficiency in basic subjects as may be necessary for his admission into one of the Upper Divisions of the College. Personal aptitude and a general scholastic ability must also be demonstrated in these two years if permission to pursue a major study be desired.

Suggested courses of study for the freshman and sophomore years are given under certain of the Divisions. The student should follow the curriculum for which he is believed to be best fitted. It will be noted that there is a great deal of similarity in these outlines for the freshman and sophomore years, and a student need not consider himself attached to any particular Division until the beginning of the junior year, at which time it is necessary to select a major.

The work of this Division is under the direction of the Chairman of the Lower Division and the Dean.

\*Students electing botany, bacteriology, or entomology as the major field are not limited to fifteen hours.



### Typical Freshman Program

	Semester	
	I	II
†Survey and Composition I (Eng. 1y).....	3	3
*Foreign Language.....	3	3
Science (Physical or Biological).....	3-4	3-4
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1

Elect five to seven credits from the following:

Reading and Speaking (Speech 1y).....	5-7	5-7
Introduction to the Social Sciences (Soc. Sci. 1y).....		
General European History (H. 1y).....		
American National Government (Pol. Sci. 1f or s).....		
History of England and Greater Britain (H. 3y).....		
Mathematics (Math. 8f and 10s, 11f and 14s, 12f and 15s).....		
Library Methods (L. S. 1f or s).....	—	—
State Government (Pol. Sci. 4s).....		
Freshman Lectures .....	—	—
Total.....	16-17	16-17

### Typical Sophomore Program

Survey and Composition II (Eng. 2f and 3s).....	3	3
Foreign Language .....	3	3
R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
General Electives from the College of Arts and Sciences, of which not more than three hours per semester may be taken in the Humanities.....	9-10	9-10
Total .....	17-18	17-18

### Common Requirements for Graduation

1. **English and Speech**—fourteen semester hours. Of these, Survey and Composition I and Reading and Speaking are prescribed.
2. **Foreign Languages and Literature**—twelve semester hours (or equivalent) in one language. In satisfaction of this requirement college credit of six semester credit hours is allowed for two units of credit in any one language offered for entrance.

†A placement test is given during Freshman Week to determine whether the student is adequately prepared for Eng. 1y. Students failing this are required to take Eng. 1A, a one-semester course, without credit. After five weeks, students may be transferred from 1A to 1y. for which they will receive full credit, or from 1y to 1A, according to their demonstrated ability.

\*Students who offer two units of a foreign language for entrance, but who because of inadequate preparation register for the first year of the subject, will receive only one-half credit.

3. **Social Sciences**—twelve semester hours.
4. **Natural Sciences and Mathematics**—twelve semester hours. Of these, one year must be in natural science.
5. **Military Science or Physical Education**—six semester hours.

*Additional requirements of the Upper Divisions are given on pages 95-109.*

### UPPER DIVISIONS

#### General Regulations

The student must satisfy the general requirements of the University on pages 50-52 as well as the common requirements for graduation on page 94 and the additional requirements for graduation of each Division.

Attention is also called to the separate pamphlet entitled Academic Regulations.

### THE DIVISION OF HUMANITIES

The Division consists of the departments of Classical Languages, Comparative Literature, English Literature and Philology, Modern Languages, Music, Philosophy, and Speech. It has charge of students who elect major work in English or Modern Languages, and also may provide minors for students who take their major work in other Divisions or Colleges.

#### Additional Requirements for Graduation

The following additional requirements should be completed, as far as possible, before the beginning of the junior year, and *must* be completed before graduation.

1. **Library Science**—one semester hour.
2. **English 2f and 3s**—six semester hours.
3. **Modern Language**—To be accepted unconditionally in the Division of Humanities, a student must have attained a reasonable proficiency in at least one modern foreign language, and in any case he must give proof of this proficiency before graduation. In satisfaction of this requirement, the grade of C or better must be obtained in one of the general language examinations which are given during the first and last days of each school year. The student must show in this examination that he has reached the level of attainment to be expected after two years of a college language course: (1) that he can translate with reasonable accuracy; (2) that his pronunciation is approximately correct; (3) that he is acquainted with the elements of grammar. The student may elect to take this examination whenever he wishes, and when he passes it he will have satisfied this requirement; but in no case will a student in the Division of Humanities be graduated who has not had at least 6 semester hours of modern language work in college.
4. **Philosophy**—three semester hours.
5. **Psychology**—three semester hours.



### Major and Minor Requirements

At the beginning of the junior year, each student must select a major in one of the fields indicated below, and before graduation must complete one major and one minor. The courses constituting the major and the minor must conform to the requirements of the department in which the major work is done. A minimum of 126 hours (including the basic requirements in military science or physical education) shall be completed before the Division will recommend a student for graduation. Of these a minimum of 60 hours must be completed in the junior and senior years. The average grade of work taken in the major field must be as high as C.

### Fields of Study

\*\*Classical Languages  
†Comparative Literature  
English  
French  
German

\*\*Music  
†Philosophy  
\*\*Speech  
Spanish

In selecting a major or a minor, a student must have completed twelve semester hours in fundamental courses, in the field chosen or in a closely related field satisfactory to the Division, with an average of at least C, before credit will be allowed toward the completion of major or minor requirements. In addition:

A major shall consist of not fewer than 20 nor more than 36 semester credit hours in one of these fields of study. At least 16 of these hours must be taken in courses listed for advanced undergraduates and graduates.

A minor shall consist of not fewer than 12 nor more than 20 semester credit hours in one of the above fields of study not selected for the major or in some other field of study authorized in the College of Arts and Sciences. At least 9 of these hours must be taken in courses listed for advanced undergraduates and graduates.

The student must take at least 30 credit hours not included in the major or minor.

### Advisers

The student shall consider the head of his major department his special adviser, and shall consult him about the arrangement of his schedule and any other matters in which he may need advice. The Chairman of the Division shall determine each student's load, in conformity with the regulations of the Division.

†Not available at present for a major.

\*\* Not available at present for a major or a minor.

### Normal Load

The normal load in the junior and senior years shall be 15 hours per semester. With the permission of the Chairman of the Division, the load may be increased to 17 hours, an absolute maximum except for honor students. The load of honor students shall lie within the discretion of the Division, but in no case shall it exceed nineteen hours a semester.

### THE DIVISION OF NATURAL SCIENCES

The Division of Natural Sciences is composed of the departments of Chemistry, Mathematics, Physics, and Zoology of the College of Arts and Sciences, and the associated departments of Bacteriology, Botany, Entomology, and Geology in other colleges of the University.

Since a knowledge of natural science is deemed essential to any well-rounded education, all students in the University are required to pursue at least one year's study in one or more of its fields. In its curricula, each requiring four years for completion, this Division prepares students for the degree of Bachelor of Science or Bachelor of Arts. Its graduates are prepared to occupy positions as bacteriologists, botanists, chemists, entomologists, mathematicians, physicists, and zoologists, in commercial laboratories, as employees in various branches of the Government service, patent examiners, technical salesmen, instructors in high schools and colleges, and teachers or research assistants in universities. Students in the scientific pre-professional curricula are prepared for entrance to colleges of dentistry, medicine, and nursing.

The sciences have so grown and their applications have become so extensive that it is impossible to deal with all phases of any one of them in the four years of college study. For this reason a vital part of the work of the Division is in the form of graduate courses. In the work leading toward the Degree of Master of Science or Master of Arts the student is to become acquainted with the general aspects of his chosen field. In preparation for the degree of Doctor of Philosophy the student is trained in methods of research which should enable him to add to human knowledge, undertake independent investigation in his science, or take charge of industrial developments. A description of the courses for undergraduates and graduates in this division is given in another part of this catalogue.

### Additional Requirements for Graduation

The following additional requirements should be completed, as far as possible, before the beginning of the junior year, and must be completed before graduation:

1. **Natural Sciences**—twelve semester hours. These are in addition to the common requirement of twelve hours, and include a course in biology.



### Major and Minor Requirements

At the beginning of the junior year, each student must select a major in one of the fields described later, and before graduation must complete a major and a minor. The courses constituting the major and the minor must conform to the requirements of the department in which the major work is done. A minimum of 126 hours (including the basic requirements in military science or physical education) shall be completed before the Division will recommend a student for graduation. Of these, a minimum of 60 semester hours must be completed in the junior and senior years. The average grade for work taken in the major field must be at least C.

In selecting a major or a minor, a student must have completed twelve semester hours in fundamental courses, in the field chosen or in a closely related field satisfactory to the Division, with an average grade of at least C, before credit will be allowed toward completion of the major or minor requirements. In addition:

A major shall consist of not fewer than 20 nor more than 36 semester credit hours in one of these fields of study. At least 8 of these hours must be taken in courses listed for advanced undergraduates and graduates.

A minor shall consist of not fewer than 12 nor more than 20 semester credit hours in one of the fields of study not selected for the major or in some other field of study authorized in the College of Arts and Sciences. At least 6 of these hours must be taken in courses listed for advanced undergraduates and graduates.

Not more than 15 semester hours may be taken in any field of study other than the major or minor in addition to the specific requirements.

### Advisers

The student must consider the head of his major department his special adviser, and shall consult him about the arrangement of his outline of courses and any other matters in which he may need advice.

### Normal Load

The normal load in the junior and senior years shall be 15 hours per semester. With the permission of the Chairman of the Division, the load may be increased to 17 hours, an absolute maximum except for honor students. The load of honor students shall lie within the discretion of the Division, but in no case shall it exceed nineteen hours a semester.

## FIELDS OF STUDY

### Bacteriology

Bacteriology offers training in general, pathogenic, dairy, and sanitary bacteriology, and prepares students for positions in federal, state, public health, research, and commercial bacteriological laboratories. For the four year outline of study in Bacteriology, see College of Agriculture, page 73.

### Botany

Botany offers students an opportunity for training for positions as teachers, and investigational workers in state or governmental experiment stations, for governmental inspection work, or for the various vocations involving botanical applications. For the four year outline of study in Botany, see College of Agriculture, page 74.

### Chemistry

The Department of Chemistry includes Agricultural, Analytical, Industrial, Inorganic, Organic, and Physical Chemistry, together with the State Control Work.

Courses in these branches of Chemistry are arranged with a view to contributing toward the liberal education of the student in Arts and Sciences; the laying of the scientific foundation necessary for the professions of medicine, dentistry, pharmacy, engineering, and agriculture; and the training of students for careers in chemistry.

It should be noted that the chemistry curriculum hereinafter outlined is designed to insure adequate instruction in the fundamentals of chemistry, as well as to meet the specific requirements of the Division. At the same time, it has been considered desirable to preserve as high a degree of flexibility as possible, in order to afford the student who has a definite end in view as regards chemistry an opportunity to fit his course to his actual needs. In general it may be said that the outline proposed prepares students to enter the following fields:

1. General Chemistry: Here the student is offered a liberal selection of subjects in the arts and sciences. Through coöperation with the College of Education, he may so supplement this basic outline with work in Education as to meet the requirements for the State high school teacher's certificate. To prepare for college teaching, one requires graduate study leading to a higher degree.

2. Industrial Chemistry: If the student wishes to prepare himself for the chemical industry or, by further study, chemical engineering, he will elect mechanical drawing in the first year, and advanced mathematics and physics and industrial chemistry in the third and fourth years.

3. Biological Chemistry (Agricultural Chemistry): The object of this curriculum is to provide training for students desiring to prepare for the application of chemistry in the fields of agriculture and biology. This is accomplished by electing zoology and botany and additional courses in biology and physiological chemistry.

4. Chemical Research: Preparation for research and graduate study in chemistry is also based upon the suggested outline. For advanced study, it is advisable that election be made largely from courses in chemistry and the allied sciences. The graduate outline offered by the Department of Chemistry is found in detail in the catalogue of the Graduate School.



## The Chemistry Curriculum Outline Suggested

	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
French or German (French 1y or German 1y).....	3	3
College Algebra and Analytic Geometry (Math. 11f and 12f, Math. 14s and 15s).....	3-4	3-4
General Chemistry (Chem. 1y).....	4	4
Reading and Speaking (Speech 1y).....	1	1
Mechanical Drawing (Dr. 4y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	16-17	16-17
<i>Sophomore Year</i>		
Survey and Composition II (Eng. 2f and 3s).....	3	3
Scientific French or German (French 3y or German 3y).....	3	3
Calculus (Math. 16y, Math. 17y).....	3-4	3-4
Qualitative Analysis (Chem. 2y).....	3	3
Elementary Organic Chemistry (Chem. 8Ay and 8By).....	3	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
	17-18	17-18
<i>Junior Year</i>		
Quantitative Analysis (Chem. 6y).....	4	4
Advanced Organic Chemistry (Chem. 116y and 117y).....	3	3
General Physics (Phys. 2y).....	5	5
Electives (Social Sciences).....	3	3
	—	—
	15	15
<i>Senior Year</i>		
Physical Chemistry (Chem. 102y).....	5	5
Electives (Humanities, Sciences) .....	10	10
	—	—
	15	15

### Entomology

This department offers training in entomology for future work in pest control, and in the preparation of technically trained entomologists. For the four year outline of study in entomology see College of Agriculture, page 79.

## General Science

For the benefit of such students as desire a general basic knowledge of the natural sciences without immediate specialization in any one of them, a general curriculum may be arranged.

By a proper selection of electives a student upon completion of the course would be eligible to pursue graduate work in any department of the Division.

If electives be properly chosen in the educational field, a prospective teacher of general science or of any of the specific sciences included in the Division may obtain a state teacher's certificate, and in turn be prepared to pursue graduate work in Education.

### Mathematics

The department of Mathematics offers a curriculum of study based on the recognition of four distinct categories of students to whom mathematics is taught:

A. To students who regard mathematics as but a part of the cultural equipment acquired in college, who have little or no interest in the technical aspects of the subject, but desire to know the place which mathematics occupies in the general scheme of things, the department offers an orientation course in mathematics (Math. 10s). Courses 111f and 112s have also been devised to meet such requirements.

B. To students who need a rudimentary knowledge of mathematics in order that they may understand its application to such fields as physics, thermodynamics, statistics, etc., the department offers basic courses in algebra, trigonometry, and analytic geometry.

C. To prospective engineers, industrial chemists, statisticians, and others who have chosen professions where mathematics is an indispensable aid to design and research, the department, in addition to the basic work outlined above, offers courses in calculus, pure and applied, and elementary differential equations. Moreover, such students, upon completion of these basic studies, will be equipped to enter many of the advanced special courses listed elsewhere in this catalogue.

D. Finally, there are students who have chosen mathematics for a career, with the view either of teaching the subject or of engaging in mathematical investigation. The department has designed for such students a comprehensive curriculum of study, leading towards the degrees of Bachelor of Arts or Bachelor of Science and Master of Arts or Master of Science. Prospective candidates for such degrees will be expected to acquire during their college career a well balanced education; they are, therefore, urged to apply as early as possible to the head of the department for a comprehensive outline of study. A typical schedule of the kind is the following:



## The Mathematics Curriculum

Outline Suggested	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
French or German (French 1y or German 1y).....	3	3
College Algebra, Trigonometry, and Analytic Geometry (Math. 11f, 12f, 14s, and 15s).....	4	4
Geometrical Drawing and Modeling (Math. 18y).....	1	1
Reading and Speaking (Speech 1y).....	1	1
General Chemistry (Chem. 1y).....	4	4
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	17	17
<i>Sophomore Year</i>		
Survey and Composition II (Eng. 2f and 3s).....	3	3
French or German (French 3y or German 3y).....	3	3
Calculus (Math. 16y and 17y).....	4	4
Advanced Geometrical Drawing and Modeling (Math. 19y).....	1	1
General Physics (Phys. 2y).....	5	5
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
	—	—
	18	18
<i>Junior Year</i>		
Plane Curves (Math. 125f).....	2	—
Advanced Topics in Calculus (Math. 127f).....	2	—
History of Mathematics (Math. 122s).....	—	2
Advanced Differential Equations (Math. 128s).....	—	2
Physical Chemistry (Chem. 102Ay).....	3	3
Advanced Physics (Phys. 106s or 108s).....	—	3
Biology .....	3	—
Electives (History, Sociology, Economics).....	5	5
	—	—
	15	15
<i>Senior Year</i>		
Electives (Mathematics and Astronomy).....	4	4
Seminar and Dissertation (Math. 140y).....	1	1
Advanced Physics (Phys. 109y).....	3	3
Education (Ed. Psych. 1f, and Ed. 5s and 6s).....	3	3
Electives (Philosophy, Logic, etc.).....	4	4
	—	—
	15	15

## Physics

The courses in Physics are designed (1.) to provide students of Arts and Sciences with a knowledge of the basic scientific principles of the physical world and an insight into the functioning of a quantitative science; (2.) to lay some of the scientific foundation for the curricula of dentistry, engineering, home economics, medicine, pharmacy, etc.; (3.) to prepare prospective teachers and instructors for high schools and colleges; (4.) to train students who are specifically interested in physics for positions in experimental and research physical laboratories (college, governmental, and industrial).

The curriculum given here is intended for the student who, on entering the University, has chosen to do his major work in physics. On completion of this curriculum the student will be prepared for graduate study in physics, or, by a proper selection of the electives in the senior year, for graduate work in chemistry or mathematics.

If the electives in the junior and senior years be properly chosen in the Education field, the student can meet the requirements for the state high school teacher's certificate, and, with additional graduate work in Education, be eligible for a Master's degree in Education.

Any student who has met the minimum requirements in chemistry, mathematics, and physics and has completed calculus (Math. 16y) may, with the consent of the department and the completion of such additional work as may be deemed individually necessary, select a major in physics.

## The Physics Curriculum Outline Suggested

	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
French or German (French 1y or German 1y).....	3	3
College Algebra, Trigonometry, and Analytic Geometry (Math. 11f, 12f, 14s and 15s).....	4	4
General Chemistry (Chem. 1y).....	4	4
Engineering Drawing (Dr. 1y).....	1	1
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	17	17



	Semester	
	I	II
<b>Sophomore Year</b>		
Survey and Composition II (Eng. 2f and 3s).....	3	3
Scientific French or German (French 3y or German 3y).....	3	3
Calculus (Math. 16y and 17y).....	4	4
General Physics (Phys. 2y).....	5	5
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
	—	—
	17	17
<b>Junior Year</b>		
Advanced Topics in Calculus (Math. 127f).....	2	—
Advanced Differential Equations (Math. 128s).....	—	2
Advanced Physics (Phys. 101f, 102s, 105f, 109y).....	6	3
Qualitative Analysis (Chem. 2y).....	3	3
Elective in Biology .....	—	3
Electives (Arts, Sciences, Education).....	4	4
	—	—
	15	15
<b>Senior Year</b>		
Physical Chemistry (Chem. 102Ay).....	3	3
Advanced Physics (Phys. 101f, 102s, 105f, 109y).....	6	3
Electives .....	6	9
	—	—
	15	15

### Zoology

The undergraduate courses of the department provide the fundamental training in zoology necessary for further work in research, teaching, medicine, and related professions.

Certain courses are designed to train students specifically for service in the biological bureaus of the United States Government or the biological departments of Maryland and other states.

With the completion of prescribed courses in the College of Education, a student, while fulfilling a major in zoology, may obtain a state certificate which qualifies him to teach in the secondary schools of Maryland.

The graduate program provides a complete training in teaching and research methods in general zoology with emphasis on morphology, physiology, and marine biology. Instruction and opportunities for original investigation in the latter are supplemented by the research facilities and courses of instruction offered at the Chesapeake Biological Laboratory, a description of which is found on page 299.

Certain courses in the department are presented expressly for the cultural values which they provide in establishing, together with other work in the University, an appreciation of man and his place in nature.

The Zoology Curriculum		Semester	
Outline Suggested		I	II
<b>Freshman Year</b>			
Invertebrate Morphology (Zool. 3f).....	4	—	
Comparative Vertebrate Morphology (Zool. 4s).....	—	4	
General Botany (Bot. 1f and 2s).....	4	4	
Survey and Composition I (Eng. 1y).....	3	3	
Reading and Speaking (Speech 1y).....	1	1	
French or German (French 1y or German 1y).....	3	3	
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1	
Freshman Lectures .....	—	—	
	—	—	
	16	16	
<b>Sophomore Year</b>			
Animal Histology (Zool. 12f).....	3	—	
Vertebrate Embryology (Zool. 20s).....	—	3	
General Chemistry (Chem. 1y).....	4	4	
Survey and Composition II (Eng. 2f and 3s).....	3	3	
Scientific French or German (French 3y and German 3y).....	3	3	
College Algebra, Trigonometry, and Analytic Geometry (Math. 8f and 10s or Math. 11f and 14s).....	3	3	
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2	
	—	—	
	18	18	
<b>Junior Year</b>			
Mammalian Anatomy (Zool. 101f).....	3	—	
Faunistic Zoology (Zool. 108f and s).....	3	3	
Animal Genetics (Zool. 120s).....	—	3	
General Physics (Phys. 1y).....	4	4	
Electives (Arts, Sciences, Education).....	5	5	
	—	—	
	15	15	
<b>Senior Year</b>			
Journal Club (Zool. 106y).....	1	1	
General Animal Physiology (Zool. 103f and s).....	3	3	
Electives (Arts, Sciences, Education).....	11	11	
	—	—	
	15	15	

Those who intend to qualify for the teacher's certificate must elect 18 hours during the junior and senior years in courses prescribed by the College of Education.



## THE PREPROFESSIONAL CURRICULA

### Premedical

The minimum requirement for admission to the School of Medicine of the University of Maryland is three years of academic training in the College of Arts and Sciences. The subjects prescribed by the Council on Medical Education of the American Medical Association are covered in the first two years of the Premedical Curriculum.

Preference will be given students requesting entrance to the School of Medicine of the University who present the credits obtained by the successful completion of the three-year curriculum or its equivalent of 96 semester hours. For recommendation, a student must complete the curriculum with an average grade of B or above, and must also satisfy the Committee that he is qualified by character and scholarship to enter the medical profession.

Another advantage the three-year curriculum offers to students who successfully complete this program and enroll in the School of Medicine of this University is that they may, on the recommendation of the Dean of the School of Medicine, be awarded the degree of Bachelor of Science after the completion of the first year's work in the School of Medicine. This combined program of seven years leads to the degree of Doctor of Medicine upon the completion of the full course. The first three years are taken in residence at College Park, and the last four in Baltimore in the School of Medicine. At least two years of residence at College Park is necessary for students transferring from other colleges and universities who wish to become candidates for the combined degrees.

For requirements for admission see Section I, Entrance.

The Curriculum	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
Mathematics (Math. 8f and 10s or Math. 11f and 14s).....	3	3
Invertebrate Morphology (Zool. 3f).....	4	—
Comparative Vertebrate Morphology (Zool. 4s).....	—	4
General Chemistry (Chem. 1y).....	4	4
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	16	16

	Semester	
	I	II
<i>Sophomore Year</i>		
General Physics (Phys. 1y).....	4	4
Elementary Organic Chemistry (Chem. 8Ay and 8By).....	3	3
French or German (French 1y or German 1y).....	3	3
Animal Histology (Zool. 12f).....	3	—
Elements of Psychology (Psych. 1s).....	—	3
Survey and Composition II (Eng. 3f and 4s).....	3	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
	18	18
<i>Junior Year</i>		
Elements of Physical Chemistry (Chem. 103y).....	3	3
Quantitative Analysis (Chem. 4f).....	4	—
Vertebrate Embryology (Zool. 20s).....	—	3
French or German (French 3y or German 3y).....	3	3
Electives (Social Sciences).....	5	6
	15	15

### Senior Year

The curriculum of the first year of the School of Medicine. The student also may elect the fourth year's work from advanced courses offered in the College of Arts and Sciences. In either case the Specific Requirements of the Division of Natural Sciences for graduation must have been met.

### Predental

Students entering the College of Arts and Sciences desiring to prepare themselves for the study of dentistry are offered the following two-year outline, which meets the predental requirements of the American Association of Dental Colleges. This outline can also be used by the student if he desires to continue his college training and complete work for the Bachelor of Science degree.

The Curriculum		
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
Mathematics (Math. 8f and 10s or Math. 11f and 14s).....	3	3
General Chemistry (Chem. 1y).....	4	4
Invertebrate Morphology (Zool. 3f).....	4	—
Comparative Vertebrate Morphology (Zool. 4s).....	—	4
Mechanical Drawing (Dr. 4y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	17	17



<i>Sophomore Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Elementary Organic Chemistry (Chem. 8Ay).....	2	2
Elementary Organic Laboratory (Chem. 8By).....	1	1
General Physics (Phys. 1y).....	4	4
Electives (Humanities, Social Sciences).....	5	5
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
French or German.....	3	3
	—	—
	17	17

#### Five-Year Combined Arts and Nursing Curriculum

The first two years of this course are taken in the College of Arts and Sciences at College Park. If students enter this combined program with advanced standing, at least the second full year of the course must be completed in College Park. This course is prerequisite, and cannot be taken after the Diploma in Nursing is granted.

The remaining three years are taken in the School of Nursing in Baltimore or in the Training School of Mercy Hospital, Baltimore. In addition to the Diploma in Nursing, the degree of Bachelor of Science may, upon the recommendation of the Director of the School of Nursing, be granted at the end of the five-year course. Full details regarding this course may be found in the section of the catalogue dealing with the School of Nursing.

#### The Curriculum

<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
Foreign Language .....	3	3
General Chemistry (Chem. 1y).....	4	4
Reading and Speaking (Speech 1y).....	1	1
History (H. 1y or 3y).....	3	3
State Government (Pol. Sci. 4s).....	—	2
Library Methods (L. S. 1f).....	1	—
Physical Education (Phys. Ed. 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	—	—
	16	17

<i>Sophomore Year</i>	<i>Semester</i>	
	<i>I</i>	<i>II</i>
Expository Writing (Eng. 5f and 6s).....	2	2
Principles of Sociology (Soc. 1f).....	3	—
Elements of Psychology (Psych. 1s).....	—	3
Fundamentals of Economics (Econ. 5s).....	—	3
General Bacteriology (Bact. 1As).....	—	2
General Zoology (Zool. 1f).....	4	—
Foods (H. E. 31y).....	3	3
Nutrition (H. E. 131f).....	3	—
Child Nutrition (H. E. 136s).....	—	2
Physical Education (Phys. Ed. 6y and 8y).....	2	2
	—	—
	17	17

#### THE DIVISION OF SOCIAL SCIENCES

This Division has charge of students who elect their major work in the departments of Economics and Business Administration, History, Political Science, Psychology, and Sociology. It also provides minor courses of study for students who take major work in this or other Divisions or Colleges.

#### General Requirements for Graduation

There are no additional requirements; but the common requirements for graduation should be completed as far as possible before the beginning of the junior year, and must be completed before graduation.

#### Major and Minor Requirements

At the beginning of the junior year, each student must select a major in one of the fields indicated below, and before graduation must complete one major and one minor. The courses constituting the major and the minor must conform to the requirements of the department in which the major work is done. A minimum of 126 hours (including the basic requirements in military science or physical education) shall be completed before the Division will recommend a student for graduation. Of these, a minimum of 60 hours must be completed in the junior and senior years. The average grade of work taken in the major field must be as high as C.

#### Fields of Study

Accounting and Finance	Political Science
Economics	*Psychology
History	Sociology

In selecting a major or a minor, the student must have completed 12 semester hours in fundamental courses in the field chosen or in a closely

\*Psychology may be chosen for minor work, or combined with Philosophy to form a major.



related field satisfactory to the Division, with an average grade of at least C before credit will be allowed towards the completion of major or minor requirements. In addition:

A major shall consist of not fewer than 20 nor more than 36 semester hours in one of the above fields of study. At least 10 of these hours must be taken in courses listed for advanced undergraduates and graduates.

A minor shall consist of not fewer than 12 nor more than 20 semester credit hours in one of the above fields of study not selected for the major, or in some other field of study authorized in the College of Arts and Sciences. At least 6 of these hours must be in courses listed for advanced undergraduates and graduates.

#### Advisers

The student shall consider the head of his major department his special adviser, and shall consult him about the arrangement of his schedule and any other matters in which he may need advice. The Chairman of the Division shall determine each student's load, in conformity with the regulations of the Division.

#### Normal Load

The normal load in the junior and senior years shall be 15 hours per semester. With permission of the Chairman of the Division, the load may be increased to 17 hours, an absolute maximum except for honor students. The load of honor students shall lie within the discretion of the Division, but in no case shall it exceed 19 hours per semester.

### BUSINESS ADMINISTRATION

The aim of the two curricula that are offered in the field of business administration is to afford those who have chosen business as a career a training in the general principles of business, because men who seek advancement must be broadly trained and not merely drilled in a specific routine. Both curricula combine a program of cultural development with the valuable mental discipline involved in a study of the best business methods and technic. For the freshman and sophomore years, the two curricula are the same, but at the beginning of the junior year, the first is intended to meet the needs of students who desire a general business training; whereas the second is designed for students who seek more highly specialized work in accounting and finance.

Business Administration Curriculum		Semester	
Freshman Year		I	II
Survey and Composition I (Eng. 1y).....		3	3
Science (Botany, Chemistry, Zoology).....		4	4
Modern Language .....		3	3
Algebra (Math. 8f or 11f).....		3	—
Economic Geography and Industry (Econ. 1f).....		3	—
History of World Commerce (Econ. 2s).....		—	3
American National Government (Pol. Sci. 1s).....		—	3
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....		1	1
Freshman Lectures .....		—	—
		17	17

Sophomore Year			
American History (H. 2y).....		3	3
Principles of Economics (Econ. 3y).....		3	3
Survey and Composition II (Eng. 2f).....		3	—
Business English (Eng. 4s).....		—	2
Principles of Accounting (A. and F. 9y).....		4	4
Business Organization and Operation (Econ. 7f).....		2	—
Elements of Psychology (Psych. 1s).....		—	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....		2	2
		17	17

General Business			
Junior Year			
Experimental Psychology (Psych. 2f).....		3	—
Business Law (A. and F. 107y).....		3	3
Money and Credit (Econ. 101f).....		2	—
Banking (Econ. 102s).....		—	2
Inland Transportation (Econ. 112s).....		—	3
Mathematical Theory of Investment (Math. 101f).....		3	—
Elements of Statistics (Gen. 114s).....		—	3
Reading and Speaking (Speech 1y).....		1	1
*Electives .....		3	3
		15	15
Senior Year			
Corporation Finance (Econ. 103f).....		2	—
Investments (A. and F. 104s).....		—	3
Insurance (Econ. 105f).....		2	—
Public Utilities (Econ. 113f).....		2	—
Public Finance (Econ. 114s).....		—	3
Personnel Management (A. and F. 106s).....		—	2
Extempore Speaking (Speech 9f).....		1	—
*Electives .....		8	7
		15	15

\*Electives must be chosen first to fulfill the common requirements for graduation. In the senior year at least 3 hours each semester must be elected from Accounting and Finance or Economics.



## Accounting and Finance

	Semester	
	I	II
<i>Junior Year</i>		
Experimental Psychology (Psych. 2f).....	3	—
Business Law (A. and F. 107y).....	3	3
Money and Credit (Econ. 101f).....	2	—
Banking (Econ. 102s).....	—	2
Advanced Accounting (A. and F. 110y).....	3	3
Mathematical Theory of Investment (Math. 101f).....	3	—
Elements of Statistics (Gen. 114s).....	—	3
Personnel Management (A. and F. 106s).....	—	2
Reading and Speaking (Speech 1y).....	1	1
**Elective .....	—	1
	15	15
<i>Senior Year</i>		
Corporation Finance (Econ. 103f).....	2	—
Investments (A. and F. 104s).....	—	3
Cost Accounting (A. and F. 121f and 122s).....	2	2
Income Tax Accounting (A. and F. 123f).....	3	—
Public Utilities (Econ. 113f).....	2	—
Insurance (Econ. 105f) .....	2	—
Auditing (A. and F. 126s).....	—	2
**Electives .....	4	8
	15	15

## COMBINED PROGRAM IN ARTS AND LAW

The School of Law of the University requires two years of academic credit for admission to the school, or sixty semester hours of college credit.

The University offers a combined program in Arts and Law, leading to the degrees of Bachelor of Arts and Bachelor of Laws. Students pursuing this combined program will spend the first three years in the College of Arts and Sciences at College Park. During this period they will complete the prescribed curriculum in prelegal studies as outlined below, and must complete the common Requirements for Graduation, as indicated elsewhere. If students enter the combined program with advanced standing, at least the third full year's work must be completed in residence at College Park. Upon the successful completion of one year of full-time law courses in the School of Law in Baltimore, the degree of Bachelor of Arts may be awarded on the recommendation of the Dean of the School of Law. The degree or Bachelor of Laws will be awarded upon the completion of the combined program.

\*\*Electives must be chosen first to fulfill the common requirements for graduation.

## Semester I II

### Freshman Year

Survey and Composition I (Eng. 1y).....	3	3
Science or Mathematics.....	4-3	4-3
History of England and Greater Britain (H. 3y).....	3	3
Introduction to the Social Sciences (Soc. Sci. 1y).....	3	3
Foreign Language .....	3	3
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
	16-17	16-17

### Sophomore Year

Expository Writing (Eng. 5f and 6s).....	2	2
Principles of Economics (Econ. 3y).....	3	3
American History (H. 2y).....	3	3
American National Government (Pol. Sci. 1f).....	3	—
Elements of Psychology (Psych. 1s).....	—	3
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
*Electives .....	3	3
	17	17

### Junior Year

Largely electives, including the completion of the Common Requirements for Graduation as outlined on Page 94.

### Senior Year

First year of regular law course.

Students who are unable to take the combined program in Arts and Law may fulfill the entrance requirements of the School of Law by completing the first two years of prelegal studies as outlined in the above combined course.

\*Electives should be in English, history, Latin or modern languages, economics or political science, or some of the common requirements for graduation.



## COLLEGE OF EDUCATION

WILLARD S. SMALL, *Dean*.

The College of Education meets the needs of the following classes of students: (1) undergraduates preparing to teach the cultural and the vocational studies in high schools, preparatory schools, and vocational schools; (2) students who will enter higher institutions to prepare for work in specialized educational and institutional fields; (3) students preparing for educational work in the trades and industries; (4) students preparing to become county agents, home demonstrators, boys' and girls' club leaders, other extension workers, and social workers; (5) students whose major interest is in other fields, but who desire courses in education for their informational and cultural values; (6) advanced students preparing to become high school principals, elementary school principals, educational supervisors, attendance officers, and school administrators.

The Summer Session, although organically distinct from the College of Education, is administered by the Dean of the College of Education, and is in effect an administrative division of the College.

### Departments

The instructional work of the College of Education is conducted by the following functional divisions: History and Principles of Education, Educational Psychology, Methods in High School Subjects, Agricultural Education, Home Economics Education, Industrial Education, Commercial Education, and Physical Education.

### Requirements for Admission

The requirements for admission to the College of Education are in general the same as for the other colleges of the University. See Section I, Entrance.

For additional requirements for admission to the curriculum in Agricultural Education, see page 122.

Candidates for admission whose high school records are consistently low are strongly advised not to seek admission to the College of Education.

### Admission of Normal School Graduates

Graduates of the two- and three-year curricula of the Maryland Normal Schools and other accredited normal schools whose scholastic records in the respective normal schools were satisfactory, will be admitted to advanced standing and classified provisionally in appropriate classes. Graduates of the two-year normal school curriculum, in most cases, may

satisfy the requirements for the degree of Bachelor of Science in Elementary Education by attendance for two full college years; graduates of the three-year curriculum, by attendance for one full college year.

Those who wish to satisfy the requirements for certification as high school teachers need more time. The amount of time required is not uniform, but depends upon the high school subjects to be taught and the individual ability of the student.

For detailed information, one should apply to the Dean of the College of Education.

### Degrees

The degrees conferred upon students who have met the conditions prescribed for a degree in the College of Education are Bachelor of Arts and Bachelor of Science. Upon completion of 128 credits in conformity with the requirements specified under Curricula and in conformity with the general requirements of the University, the appropriate degree will be conferred.

### Teacher's Special Diploma

The Teacher's Special Diploma is not awarded to all students who satisfy the requirements for graduation. It is awarded, at the time of graduation, to students whose quality of scholarship, personal traits, successful practice teaching, and professional attitude indicate distinct promise of success as teachers. Each award is by vote of the Faculty of the College of Education.

This diploma is not required by official certificating authorities.

A graduate who, at the time of graduation, is not eligible for this award, may be awarded the Teacher's Special Diploma upon presentation of evidence of a year or more of successful teaching experience.

Teachers' special diplomas are granted in the Biological Sciences, Chemistry, English, French, General High School Science, History and Social Sciences, Mathematics, Mathematics-Physics, Vocational Agriculture, Vocational Home Economics, Industrial Education, Commercial Education, and Physical Education.

### Facilities

In addition to the general facilities offered by the University, certain important supplementary facilities are available.

**Supervised Teaching.** Actual experience in teaching under competent supervision is of basic importance in the preparation of teachers. A coöperative arrangement with the Prince Georges County School authorities is in effect whereby students preparing to teach get this experience in the Hyattsville High School. This arrangement is supplemented by opportunities for supervised teaching in the high schools of Montgomery County and Howard County and in the junior and senior high schools of the District of Columbia.



**Observation.** The observation of teaching necessary for efficient teacher training is conducted in Washington and in nearby Maryland schools. The number, variety, and nearness of these schools provide ample and unusual opportunities for observation of actual classroom situations.

**Other Facilities in Washington.** The Library of Congress, the Library of the U. S. Office of Education, and the special libraries of other Government offices are accessible. The information services of the National Education Association, the American Council on Education, the U. S. Office of Education, and of other institutions, public and private, are available to students.

### Curricula

The departments of the College of Education fall into two main groups: General Education and Vocational Education. Two types of curricula are offered, corresponding with these two major groupings.

**General Education.** The first of these is designed to prepare teachers of academic and scientific subjects and the special subjects in high schools. The basic requirements are fixed and definite, but the student may select from a number of subjects the major and minor subjects in which he expects to qualify for teaching. One may qualify for the degree either of Bachelor of Arts or of Bachelor of Science, depending upon one's election of major subject.

The requirements for majors and minors (see Specific Requirements, page 120) satisfy the regulations of the State Department of Education in regard to "the number of college credits required in any two or more subjects which are to be placed on a high school teacher's certificate."

Some of the most common combinations of academic subjects in the high schools of the State are as follows: English and History; English and French; History and French; Mathematics and one or more of the high school Sciences.

Combinations of academic and scientific subjects with Physical Education, Home Economics, Industrial Arts, Commercial Subjects, and Music are desirable.

**Vocational Education.** The curricula in Vocational Education are designed for the definite purpose of preparing teachers of agriculture, home economics, and trade and industrial Education. As the University of Maryland is the institution designated by the State Board of Education for the training of teachers of vocational agriculture, home economics, and trades and industries under the provisions of the Smith-Hughes Vocational Educational Act, the curricula in this class have been organized to meet the objectives set up in the act and in the interpretations of the Federal Board of Vocational Education and the State Board of Education. These curricula lead to the degree of Bachelor of Science.

### Professional Requirements

The first two years of college work are preparatory to the professional work of the junior and senior years. Students who, in the first two years, by reason of temperament, health, industry, and scholastic progress, give promise of becoming successful teachers are encouraged to continue in the curricula of the College of Education; those who, by reason of health deficiencies, of weakness in oral and written English, and of unfavorable personal traits, are unlikely to succeed as teachers are advised to transfer to other fields.

### Sophomore Status

The Introduction to Teaching scheduled for the sophomore year is an orientation course. It is designed with the twofold purpose of giving students a view of the teacher's job and of testing the aptitude and fitness of students for teaching. Admission to this course is based upon (1) completion of at least 30 semester hours of freshman work with an average grade as high as C; and (2) passing of series of tests which are designed to determine the student's preparation for the special demands of this course.

### Professional Courses

The professional courses recognized by the State Department of Education for certification are given only in the junior and senior years. The minimum requirement for these is 16 semester hours, of which the following are prescribed: Educational Psychology, Technic of Teaching, Observation of Teaching, Special Methods and Supervised Teaching, and Principles of Secondary Education. *To be eligible to enter the professional courses in the junior year, a student must have an average grade as high as C at the end of the sophomore year. Continuance in such courses will be contingent upon his maintaining an average grade as high as C; and a grade as high as C in each required professional course.*

From the offerings of Education the District of Columbia requirement of 24 semester hours of professional courses may be fully met.

The special requirements of each curriculum are shown in the tabular statements of the curricula for the several departments.

### Certification of High School Teachers

The State Department of Education certifies to teach in the approved high schools of the State only graduates of approved colleges who have satisfactorily fulfilled subject-matter and professional requirements. Specifically it limits certification to graduates who "rank academically in the upper four-fifths of the class and who make a grade of C or better in practice teaching."

### Guidance in Registration

All students wishing to prepare for teaching should consult the Dean of the College of Education regarding possible combinations and the arrangement of their work. At the time of matriculation each student is assigned



to a member of the faculty who acts as the student's personal adviser. Choice of subjects the student will prepare to teach should be made at the beginning of the sophomore year with the advice and approval of the appropriate heads of departments.

It is advisable for students who purpose to teach to register in the College of Education, in order that they may have continuously the counsel and guidance of the faculty which is directly responsible for their professional preparation. Such guidance is provided by regular conferences of faculty and students, and by group and individual conferences between students and personal advisers. It is permissible, however, for a student to register in that college which in conjunction with the College of Education offers the majority of the courses he will pursue in satisfying the requirements of the curriculum he elects.

The teacher's special diploma will be awarded only to the student who shall have fulfilled all of the requirements of the curriculum he elects. Students in other colleges desiring to qualify for the teacher's special diploma should consult with the Dean of the College of Education at the beginning of the sophomore year in order to plan satisfactorily their subsequent programs. Adjustments may be made as late as the beginning of the junior year. *It is practically impossible to make adjustments later than that on account of the sequence of professional subjects in the junior and senior years.*

#### ARTS AND SCIENCE EDUCATION

Students electing this curriculum may register in the College of Arts and Sciences or in the College of Education. In either case they will register with the College of Education for the teacher's special diploma. Students will be certified for graduation only upon fulfillment of all the requirements of this curriculum.

##### General Requirements

In addition to Military Science or Physical Education, required of all students in the University, the following requirements must be fulfilled by all candidates for degrees in this curriculum, preferably by the end of the sophomore year:

- (1) Survey and Composition I (Eng. 1y) and Survey and Composition II (Eng. 2f and 3s), 12 semester hours.
- (2) Reading and Speaking (Speech 1y), 2 semester hours.
- (3) Two years of foreign language, if the student enters with less than three years of foreign language; one year, if he enters with three years. No foreign language is required of students who enter with four or more years of foreign language.
- (4) Twelve semester hours of history and the social sciences, of which six must be history.
- (5) Twelve hours of natural science or of natural science and mathematics, including an elementary course in zoology.

	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
*Foreign Language .....	3	3
Science (Biological or Physical).....	3-4	3-4
From the following groups:		
History, Social Sciences, Mathematics, Science, Foreign Language .....	4-3	4-3
	—	—
	15-16	15-16

#### Sophomore Year

(See "Sophomore Status," p. 117)

Introduction to Teaching (Ed. 2f and 3s).....	2	2
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Survey and Composition II (Eng. 2f and 3s).....	3	3
†Foreign Language .....	3	3
Electives .....	7-8	7-8
	—	—
	17-18	17-18

#### Junior Year

(See "Professional Courses," p. 117)

Educational Psychology (Ed. Psych. 1f).....	3	—
Technic of Teaching (Ed. 5 s).....	—	2
Observation of Teaching (Ed. 6 s).....	—	1
Special Methods (Ed. 120 s; 122 s; 124 s; 126 s; 128 s).....	—	2
Electives .....	13	11
	—	—
	16	16

#### Senior Year

Supervised Teaching (Ed. 139f or s).....	2	2
The Junior High School (Ed. 110f).....	3	—
	or	
Principles of Secondary Education (Ed. 103 s).....	—	3
Electives .....	11-13	10-12
	—	—
	16	15

\* Except students entering with four or more units of language.  
† For students entering with less than three units of language.



### Specific Requirements

Each student is expected to prepare for the teaching of at least two high school subjects in accordance with the certification requirements of the State Department of Education (By-law 30 revised). These are designated as major and minor subjects, with a requirement of from 30 to 36 semester hours of credit for a major and from 20 to 24 hours for a minor. If it is deemed advisable for a student to prepare for the teaching of three high school subjects, the requirement for a major may be modified at the discretion of the Dean to permit the pursuit of three subjects to the extent required for State certification. Semester hour requirements are detailed below.

*No student who has not met all previous requirements will be permitted to do practice teaching.*

**English.** For a major in English 36 semester hours are required as follows:

Survey and Composition I.....	6 semester hours
Survey and Composition II.....	6 semester hours
Shakespeare (Eng. 11f and 12s).....	6 semester hours
Electives .....	18 semester hours
Total.....	36

A minor in English requires 26 semester hours. It includes the 18 hours prescribed for the major and 8 hours of electives.

The electives must be chosen from a selected list of courses with the approval of the instructor in "English in the High School."

Survey and Composition I and II must be completed by the end of the junior year.

**History and Social Sciences.** For a major in this group 30 semester hours are required, as follows:

History .....	18 semester hours
Economics or Sociology.....	6 semester hours
Electives .....	6 semester hours

For a minor, the same requirements less the electives.

Students with a major or minor in History and Social Sciences must complete Modern European History and American History by the end of the junior year.

**Modern Languages.** For a major in Modern Languages 30 semester hours are required; for a minor 24 semester hours.

At least 18 hours of a major or minor in modern language must be completed by the end of the junior year.

A major or minor in French must include French 2s, 9y, 10y, and at least one course of the 100 group.

A major or minor in Spanish must include Spanish 2s, 5s, 6y, and at least one course of the 100 group.

A major or minor in German must include German 2s, 5s, 10y, and at least one course of the 100 group.

**Mathematics.** Twenty-eight semester hours are required for the major. The following sequence is recommended: Math. 11f, Math. 12f, Math. 18y, Math. 7f, and Math. 10s in the freshman year; Math. 19y, Math. 14s, and Math. 15s in the sophomore year; Math. 16y, Math. 17y (optional) in the junior year; Math. 111f, Math. 112s, Math. 123f, Math. 122s in the senior year.

For the minor the following course sequence is advised: Math. 11f, Math. 7f, Math. 10s in the freshman year; Math. 14s in the sophomore year; Math. 16y in the junior year; Math. 111f, Math. 122s in the senior year.

Students who pass an examination in solid geometry or trigonometry may be excused from Math. 7f or Math. 10s, respectively. For all majors and minors in mathematics, Ed. 128s and Ed. 135f are indicated.

**Mathematics-Physics.** This major consists of 18 hours in mathematics and 18 hours in physics. The normal sequence of courses is Math. 11f, Math. 7f, Math. 10s, Math. 14s, Math. 16y, Math. 111f, Math. 122s, and Phys. 1y, Phys. 103y.

Students who pass an examination in solid geometry or trigonometry may be excused from Math. 7f or Math. 10s, respectively.

Chemistry 1y is required as a supporting course to this major. Ed. 128s, Ed. 135f, and Ed. 137s should be taken.

If a minor in general science is offered in connection with this major, a total of 38 hours in the natural sciences should be presented.

**Science.** In general science, a major and a minor are offered consisting of 34 and 28 hours respectively, each including elementary courses in chemistry, physics, and biology (zoology and botany). Minors of twenty semester hours are offered in chemistry, physics, and biological science. A minor in biology must include the basic courses in botany and zoology.

A minor in chemistry must be supported by the elementary course in physics. Minors in physics and biology must be supported by the elementary course in chemistry, which should be completed before the beginning of the junior year. For students whose main interest is in biological science, Ed. 126s and Ed. 136f are indicated, as are Ed. 126s and Ed. 137s for those who are interested chiefly in physics or chemistry.

If a major in general science is accompanied by a minor in chemistry, physics, or biology, the same credits may be counted towards both, provided that they number not less than 52 semester hours in natural science.

### AGRICULTURAL EDUCATION

The objectives of the curricula in Agricultural Education are the teaching of secondary vocational agriculture, the work of county agents, and allied lines of the rural education service.



Curriculum A is designed for persons who have had no vocational agriculture in high school or less than two years of such instruction. Curriculum B is designed for persons who have had two or more years of thoroughgoing instruction in secondary agriculture of the type offered in Maryland high schools. Curriculum B relieves the student of the necessity of pursuing beginning agriculture courses in the first two years of his college course, permits him to carry general courses in lieu of those displaced by his vocational program in high school, and offers him an opportunity to lay a broad foundation for the advanced work in agriculture of the last two college years.

In addition to the regular entrance requirements of the University, involving graduation from a standard four-year high school, students electing the agricultural education curricula must present evidence of having acquired adequate farm experience after reaching the age of fourteen years.

Students with high averages upon petition may be relieved of certain requirements in these curricula, when evidence is presented showing that either through experience or through previous training the prescription is non-essential; or they may be allowed to carry an additional load.

Students electing these curricula may register in the College of Agriculture or in the College of Education. In either case they will register with the College of Education for the teacher's special diploma. Students will be certified for graduation only upon fulfillment of all the requirements of this curriculum.

#### Curriculum A.

	Semester	
	I	II
<i>Freshman Year</i>		
General Animal Husbandry (A. H. 1f).....	3	—
Principles of Vegetable Culture (Hort. 11 s).....	—	3
General Chemistry (Chem. 1Ay or 1By).....	4	4
General Botany (Bot. 1f).....	4	—
General Zoology (Zool. 1 s).....	—	4
Survey and Composition I (Eng. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y) .....	1	1
	—	—
	16	16

	Semester	
	I	II
<i>Sophomore Year</i>		
Diseases of Plants (Plt. Path. 1f).....	4	—
Introductory Entomology (Ent. 1 s).....	—	3
Cereal Crop and Forage Crop Production (Agron. 1f and 2 s).....	3	3
Geology (Geol. 1f).....	3	—
Soils and Fertilizers (Soils 1 s).....	—	3
Dairy Production (D. H. 101 y).....	3	3
Elementary Pomology (Hort. 1f).....	3	—
Fundamentals of Economics (Econ. 5 s).....	—	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y) .....	2	2
	—	—
	18	17
<i>Junior Year</i>		
Educational Psychology (Ed. Psych. 1f).....	3	—
Farm Practicums and Demonstrations (R. Ed. 101f and 102 s).....	1	1
Mechanical Drawing (Dr. 4y).....	1	—
Farm Machinery (Agr. Engr. 101f).....	3	—
Gas Engines, Tractors, and Automobiles (Agr. Engr. 102 s).....	—	3
Farm Poultry (Poultry 1 s).....	—	3
Genetics (Gen. 101f).....	3	—
Methods of Crop and Soil Investigations (Agron. 121 s).....	—	2
Agricultural Economics (A. E. 2f).....	3	—
Rural Life and Education (R. Ed. 104 s).....	—	3
Electives .....	—	4
	—	—
	14	16
<i>Senior Year</i>		
Observation and the Analysis of Teaching for Agricultural Students (R. Ed. 107f).....	3	—
Project Organization and Cost Accounting (R. Ed. 105f).....	2	—
Teaching Secondary Vocational Agriculture (R. Ed. 109f).....	3	—
Departmental Organization and Administration (R. Ed. 112 s).....	—	2
Practice Teaching (R. Ed. 120f or s).....	—	2
Farm Shop Work (Agr. Engr. 104f).....	1	—
Teaching Farm Shop in Secondary Schools (R. Ed. 114 s).....	—	1
Principles of Secondary Education (Ed. 103 s).....	—	3
Marketing of Farm Products (A. E. 102 s).....	—	3
The Novel (Eng. 120f and 121 s) or Expository Writing (Eng. 5f and 6 s).....	2	2
	—	—
	2	—
General Floriculture (Hort. 21f).....	—	2
General Landscape Gardening (Hort. 31 s).....	—	—
Farm Organization and Operation (A. E. 108f).....	3	—
	—	—
	16	15



### Curriculum B.

	Semester	
	I	II
<i>Freshman Year</i>		
General Chemistry (Chem. 1Ay or 1By).....	4	4
General Botany (Bot. 1f).....	4	—
General Zoology (Zool. 1 s).....	—	4
Survey and Composition I (Eng. 1y).....	3	3
Elementary Physics (Phys. 3 y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys Ed. 1y) .....	1	1
	—	—
	16	16
<i>Sophomore Year</i>		
Diseases of Plants (Plt. Path. 1f).....	4	—
General Entomology (Ent. 1 s).....	—	3
Elements of Organic Chemistry (Chem. 12Ay).....	2	2
General Bacteriology (Bact. 1 A s).....	—	2
Geology (Geol. 1f).....	3	—
Soils and Fertilizers (Soils 1 s).....	—	3
Principles of Economics (Econ. 3y).....	3	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y) .....	2	2
Electives .....	1	—
	—	—
	15	15
<i>Junior Year</i>		
Educational Psychology (Ed. Psych. 1f).....	3	—
Farm Practicums and Demonstrations (R. Ed. 101f and 102 s)....	1	1
Mechanical Drawing (Dr. 4y).....	1	—
Rural Life and Education (R. Ed. 104 s).....	—	3
Electives .....	12	13
	—	—
	17	17
<i>Senior Year</i>		
Observation and the Analysis of Teaching for Agricultural Students (R. Ed. 107f).....	3	—
Project Organization and Cost Accounting (R. Ed. 105 f).....	2	—
Departmental Organization and Administration (R. Ed. 112 s) .....	—	2
Teaching Secondary Vocational Agriculture (R. Ed. 109f).....	3	—
Farm Shop Wprk (Agr. Engr. 104f).....	1	—
Teaching Farm Shop in Secondary Schools (R. Ed. 114 s).....	—	1
Practice Teaching (R. Ed. 120f or s).....	—	2
Electives .....	7	11
	—	—
	16	16

### HOME ECONOMICS EDUCATION

The Home Economics Education curriculum is for students who are preparing to teach vocational home economics or to engage in any phase of home economics work which requires a knowledge of teaching methods.

This is a general course including work in all phases of home economics and the allied sciences, with professional training for teaching these subjects. Electives may be chosen from other colleges.

A combination curriculum for Home Economics and Physical Education is offered. This satisfies the state certification requirements for both subjects.

Opportunity for additional training and practice is given through directed teaching, home management house, and special work and observation of children in the University Nursery School.

Students electing this curriculum may register in the College of Home Economics or in the College of Education. In either case they will register with the College of Education for the teacher's special diploma. Students will be certified for graduation only upon fulfillment of all the requirements of this curriculum.

#### Home Economics Education

	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
Textiles and Clothing (H. E. 11f).....	3	—
Design (H. E. 21s).....	—	3
General Chemistry (Chem. 1y).....	4	4
Reading and Speaking (Speech 1y).....	1	1
Physical Education (Phys. Ed. 2y and 4y) .....	1	1
Electives .....	4	4
	—	—
	16	16
<i>Sophomore Year</i>		
Introduction to Teaching (Ed. 2f and 3 s).....	2	2
Foods (H. E. 31y).....	3	3
Costume Design (H. E. 24f).....	3	—
Textiles and Clothing (H. E. 12 s).....	—	3
Elements of Organic Chemistry (Chem. 12Ay).....	2	2
Elementary Physics (Phys. 3y).....	3	3
Physical Education (Phys. Ed. 6y and 8y).....	2	2
Electives .....	1	1
	—	—
	16	16



<i>Junior Year</i>		<i>Semester</i>	
		<i>I</i>	<i>II</i>
Educational Psychology (Ed. Psych. 1f).....		3	—
Technic of Teaching (H. E. Ed. 5 s).....		—	2
Observation of Teaching (H. E. Ed. 6 s).....		—	1-2
Household Bacteriology (Bact. 3 s).....		—	3
Nutrition (H. E. 131f).....		3	—
Dietetics (H. E. 102 s).....		—	3
Management of the Home (H. E. 141f and 142 s).....		3	3
Advanced Clothing (H. E. 111f).....		3	—
Electives .....		4	3-4
		—	—
		16	16
<i>Senior Year</i>			
Child Study (H. E. Ed. 102f).....		4	—
Practice in Management of the Home (H. E. 143f).....		4	—
Teaching Secondary Vocational Home Economics (H. E. Ed. 103f) .....		4	—
History of Architecture and Interior Decoration (H. E. 121y).....		3	3
Problems in Teaching Home Economics (H. E. Ed. 106 s).....		—	1
Principles of Secondary Education (Ed. 103 s).....		—	3
Electives .....		1	9
		—	—
		16	16

Electives should include one course in each of the following groups:  
Botany, Human Physiology, Sociology, English Literature.

### INDUSTRIAL EDUCATION

Three types of program are offered in Industrial Education: a four-year curriculum leading to the degree of Bachelor of Science in Industrial Education; a program of professional courses to prepare teachers to meet the certification requirements in vocational and pre-vocational or occupational schools; a program of courses for the improvement of teachers in service.

#### Four-Year Curriculum in Industrial Education

This curriculum is designed to prepare both trade and industrial teachers and teachers of industrial arts. There is sufficient latitude of electives so that a student may also meet certification requirements in some other high school subject.

The entrance requirements are the same as for other curricula offered in the University. Students entering this curriculum will be benefited by engaging in some trade or industry during the summer vacations.

One hundred twenty-eight semester credits are required for the degree of Bachelor of Science in Industrial Education.

*Students entering an Industrial Education curriculum must register in the College of Education.*

This curriculum, with slight variations according to the needs of the two groups, is so administered as to provide (A) a four-year curriculum in residence at College Park; (B) a four-year curriculum for teachers in service who have had some college work.

#### A. Curriculum for Students in Residence

The distribution of the curriculum requirements is approximately as follows:

Military Training or Physical Education.....	6 semester hours
English .....	12 semester hours
History and the Social Sciences.....	20 semester hours
Science and Mathematics.....	20 semester hours
Shop Work and Drawing.....	30 semester hours
Education .....	22 semester hours
Electives .....	18 semester hours

		<i>Semester</i>	
		<i>I</i>	<i>II</i>
<i>Freshman Year</i>			
Survey and Composition I (Eng. 1y).....		3	3
Reading and Speaking (Speech 1y).....		1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y) .....		1	1
Mechanical Drawing (Dr. 4y).....		1	1
Descriptive Geometry (Dr. 2s).....		—	2
Forge Practice (Shop 1s).....		2	1
Mathematics (Math. 8f and 10s; or 11f and 14s).....		3	3
From the following groups:			
History, Social Science, Science, Foreign Language, Physical Education .....			
		4-6	4-6
		—	—
		15-17	17-18

#### Sophomore Year

Introduction to Teaching (Ed. 2f and 3 s).....	2	2
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y) .....	2	2
Machine Shop Practice (Shop 3f).....	2	—
Elements of Plane Surveying (Surv. 1f).....	1	—
From the following groups:		
English, History, Social Science, Mathematics, Science, Foreign Language, Physical Education.....	9-10	12-13
	—	—
	16-17	16-17



The curriculum in the junior and senior years follows closely the pattern of the Arts and Science Education curriculum. (See page 119). It includes courses in Foundry Practice; Machine Shop Practice (laboratory); Farm Machinery; and Gas Engines, Tractors, and Automobiles.

*Attendance at one Summer Session is necessary for a student to get certain Industrial Arts courses offered only in the Summer Session.*

### B. Curriculum for Teachers in Service

The distribution of curriculum requirements is the same as for Curriculum A, except that the military-physical training requirement is waived. In the mathematics and science group, and in the history and social science group, there is reasonable latitude for individual choice, but courses in mathematics as related to shopwork and courses in American history and government are required.

These curriculum requirements may be met by the in-service courses in Baltimore offered by the Department of Industrial Education and by Summer Session attendance.

#### Program for Vocational and Occupational Teachers

This curriculum is designed for students who have had experience in some trade or industry or in the teaching of shopwork.

Applicants for admission to this curriculum must have as a minimum requirement an elementary school education or its equivalent. The curriculum is prescribed, but it is administered flexibly in order that it may be adjusted to the needs of students.

To meet the needs for industrial teacher-training in Baltimore and in other industrial centers, extension courses are offered. The work of these courses deals with the analysis and classification of trade knowledge for instructional purposes, methods of teaching, observation and practice of teaching, organization and management of trade and industrial classes, psychology of trade and industrial education, and occupational information, guidance, and placement.

The completion of eight teacher-training courses, which require, in general, two years of two hundred fifty-six clock hours, entitles one to a full three-year vocational teacher's certificate in the State of Maryland, and to a special diploma from the College of Education of the University of Maryland.

#### Courses for Teachers in Service

Courses are offered for teachers in service who are seeking to satisfy requirements for promotion.

A special announcement of the in-service courses in Baltimore is issued in August of each year. This may be obtained from the office of the Registrar either in Baltimore or in College Park.

## COMMERCIAL EDUCATION

The entrance requirements for the curriculum in Commercial Education are as follows: English 3 units; Algebra 1 unit; Science 1 unit; History 1 unit; Stenography 2 units; Typewriting 1 unit; Bookkeeping 1 unit; elective 5 units.

The Commercial Education curriculum includes a solid foundation of economics, social science and history, accounting and business administration subjects, adequate courses in methods of teaching commercial subjects, and supervised teaching.

The number of electives is large enough to enable a student to prepare for teaching some other subject in addition to the commercial subjects.

The curriculum does not include any college courses in shorthand and typewriting for the improvement of skill in these arts. Any student desiring to become a candidate for the bachelor's degree in commercial education must meet the speed and accuracy requirements in shorthand and typewriting and transcription necessary to become a teacher of commercial subjects either by work in commercial offices during the summer or by such other means as may be practicable for improving his skill and accuracy.

	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
Introduction to the Social Sciences (Soc. Sci. 1y).....	3	3
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Reading and Speaking (Speech 1y).....	1	1
Economic Geography and Industry (Econ. 1f).....	3	—
American National Government (Pol. Sci. 1s).....	—	3
Science (Biological or Physical).....	3	3
One from the following groups:		
History, Mathematics, Literature, Foreign Language.....	3	3
	17	17
<i>Sophomore Year</i>		
Survey and Composition II (Eng. 2f and 3s).....	3	3
American History (H. 2y).....	3	3
Introduction to Teaching (Ed. 2f and 3 s).....	2	2
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Principles of Economics (Econ. 3y).....	3	3
Electives .....	4	4
	17	17



<i>Junior Year</i>		<i>Semester</i>	
		<i>I</i>	<i>II</i>
Business Organization and Operation (Econ. 7f).....	2	—	—
Principles of Accounting (A. and F. 9y).....	4	4	—
Money and Credit (Econ. 101f).....	2	—	—
Banking (Econ. 102 s).....	—	2	—
Elements of Statistics (Gen. 114 s).....	—	3	—
Educational Psychology (Ed. Psych. 1f).....	3	—	—
Technic of Teaching (Ed. 5 s).....	—	2	—
Observation of Teaching (Ed. 6s).....	—	1	—
Electives .....	4	3	—
	15	15	—
<i>Senior Year</i>			
Business Law (A. and F. 107y).....	3	3	—
Commercial Subjects in the High School (Ed. 150f and 151s)....	2	2	—
Supervised Teaching of High School Subjects (Ed. 139 s).....	—	2	—
The Junior High School (Ed. 110f).....	2	—	—
<i>or</i>			
Principles of Secondary Education (Ed. 103s).....	—	3	—
Electives .....	8-10	5-8	—
	15	15	—

### PHYSICAL EDUCATION

The Physical Education curriculum is designed primarily to prepare teachers of physical education for the high schools. It includes 31 semester hours of physical education courses, exclusive of methods and supervised teaching. It is sufficiently specialized to meet that need. At the same time it is flexible enough so that certification requirements in other high school subjects may be met.

The curriculum includes separate courses for men and for women. Some of these courses are open to both men and women. (See Sec. III, p. 233.)

A combination curriculum for Physical Education (women) and Home Economics satisfies the State certification requirements for both subjects. *Plans for such combination should be made at the beginning of the sophomore year.* The variations in the curriculum for men and for women are shown in the curriculum outlined below.

Upon satisfactory completion of the curriculum the degree of Bachelor of Science will be conferred.

*Students electing this curriculum must register in the College of Education.*

#### General Requirements

The general requirements are the same as for Arts and Science Education (see p. 118), except that a foreign language is not required, and 13 semester hours of biological science are required, as specified in the schedule.

<i>Freshman Year</i>		<i>Semester</i>	
		<i>I</i>	<i>II</i>
Survey and Composition I (Eng. 1y).....	3	3	—
Reading and Speaking (Speech 1y).....	1	1	—
General Bacteriology (Bact. 1f).....	4	—	—
General Zoology (Zool. 1s).....	—	4	—
Introduction to the Social Sciences (Soc. Sci. 1y).....	3	3	—
From the following groups:			
History, Science, Foreign Language, Mathematics, Home Economics .....	3	3	—
(Women)			
Personal Hygiene and Physical Activities (Phys. Ed. 2y and 4y).....	1	1	—
Fundamentals of Rhythm and Dance (Phys. Ed. 10y).....	1	1	—
Music Appreciation (Mus. 1y).....	1	1	—
(Men)			
Basic R. O. T. C. (M. I. 1y).....	1	1	—
Physical Activities (Phys. Ed. 1y).....	1	1	—
Personal and Community Hygiene (Phys. Ed. 11y).....	2	2	—
	17	17	—
<i>Sophomore Year</i>			
Introduction to Teaching (Ed. 2f and 3s).....	2	2	—
Survey and Composition II (Eng. 2f and 3s).....	3	3	—
Elementary Physics (Phys. 3y).....	3	3	—
Human Physiology (Zool. 15f).....	3	—	—
Pathogenic Bacteriology (Bact. 2As).....	—	2	—
Electives .....	3	1	—
(Women)			
Personal Hygiene and Physical Activities (Phys. Ed. 6y and 8y).....	2	2	—
Games (Phys. Ed. 12f).....	2	—	—
Natural Gymnastics (Phys. Ed. 20 s).....	—	2	—
Clogs and Athletic Dances (Phys. Ed. 28f).....	2	—	—
Folk Dancing (Phys. Ed. 30 s) .....	—	2	—
(Men)			
Basic R. O. T. C. (M. I. 2y).....	2	2	—
Physical Activities (Phys. Ed. 3y).....	2	2	—
Survey of Physical Education (Phys. Ed. 21y).....	2	2	—
	17	17	—
<i>Junior Year</i>			
Educational Psychology (Ed. Psych. 1 f).....	3	—	—
Technic of Teaching (Ed. 5 s).....	—	2	—
First Aid (Phys. Ed. 16 s).....	—	1	—
Electives .....	6	7	—



	Semester	
	I	II
(Women)		
Athletics (Phys. Ed. 18 f and s).....	2	2
Natural Dancing (Phys. Ed. 32 f).....	2	—
Physical Education Activities for High School Girls (Phys. Ed. 140y) .....	2	2
Observation of Teaching (Ed. 6s).....	—	1
(Men)		
Physical Education Practice (Phys. Ed. 5 y).....	1	1
Coaching High School Athletics (Phys. Ed. 13y).....	2	2
Technics of Teaching Physical Education (Phys. Ed. 23y).....	2	2
	15	15
Senior Year		
The Junior High School (Ed. 110f).....	2	—
or		
Principles of Secondary Education (Ed. 103 s).....	—	3
or		
Physical Education in the High School (Ed. 141f)		
or		
Supervised Teaching (Ed. 139f or s).....	2	2
(Women)		
Coaching and Officiating; Athletics for Girls (Phys. Ed. 26y).....	2	2
Electives .....	9-13	8-13
(Men)		
Observation of Teaching (Ed. 6f).....	1	—
Advanced Physical Education Practice (Phys. Ed. 7 y).....	1	1
Management of Intramural Athletics (Phys. Ed. 15 y).....	2	2
Electives .....	7-11	7-12
	15	15

## COLLEGE OF ENGINEERING

S. S. STEINBERG, *Acting Dean.*

The primary purpose of the College of Engineering is to train young men to practice the profession of Engineering. It endeavors at the same time to equip them for their duties as citizens and for careers in public service and in industry.

The new economic conditions with which the engineering graduate will be faced when he goes into practice have emphasized the necessity for the adjustment of engineering curricula in their scope and objectives. It has become evident that greater emphasis than heretofore should be placed on the fundamentals of engineering, and that the engineer's training should include a knowledge of the sciences which deal with human relations and a familiarity with business organization and operation.

Accordingly, our engineering curricula have been revised recently to increase the time devoted to fundamentals and to non-technical subjects, which are a necessary part of the equipment of every educated man, and which are now considered essential to the proper training of engineers because of the practical application of these subjects in professional and business life. It is well recognized that an engineering training affords an efficient preparation for many callings in public and private life outside the engineering profession.

The College of Engineering includes the Departments of Civil, Electrical, and Mechanical Engineering. In order to give the student time to choose the branch of engineering for which he is best adapted, the freshman year of the several courses is the same. Lectures and conferences are used to guide the student to make a proper selection. The courses differ only slightly in the sophomore year, but in the junior and senior years the students are directed more definitely along professional lines.

### Admission Requirements

The requirements for admission to the College of Engineering are, in general, the same as elsewhere described for admission to the undergraduate departments of the University, except as to the requirements in mathematics. See Section I, Entrance.

It is possible, however, for high school graduates having the requisite number of entrance units to enter the College of Engineering without the unit of advanced algebra, or the one-half unit of solid geometry, provided such students are prepared to devote their first summer to a course in analytic geometry. The program for such students would be as follows: During the first semester, five hours a week would be devoted to making up advanced algebra and solid geometry; in the second semester, mathematics of the first semester would be taken, and the second semester mathematics



would be taken in the summer session. Thus, such students, if they passed the course, would be enabled to enter the sophomore year the next fall with their class without loss of time.

### **Bachelor Degrees in Engineering**

Courses leading to the degree of Bachelor of Science are offered in civil, electrical, and mechanical engineering, respectively.

### **Master of Science in Engineering**

The degree of Master of Science in Engineering may be earned by students registered in the Graduate School who hold bachelor degrees in engineering, which represent an amount of preparation and work similar to that required for bachelor degrees in the College of Engineering of the University of Maryland.

Candidates for the degree of Master of Science in Engineering are accepted in accordance with the procedure and requirements of the Graduate School, as will be found explained in the catalogue under the head of Graduate School.

### **Professional Degrees in Engineering**

The degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer will be granted only to graduates of the University who have obtained a bachelor's degree in engineering. The applicant must satisfy the following conditions:

1. He shall have engaged successfully in acceptable engineering work not less than four years after graduation.
2. He must be considered eligible by a committee composed of the Dean of the College of Engineering and the heads of the Departments of Civil, Electrical, and Mechanical Engineering.
3. His registration for a degree must be approved at least twelve months prior to the date on which the degree is to be conferred. He shall present with his application a complete report of his engineering experience and an outline of his proposed thesis.
4. He shall present a satisfactory thesis on an approved subject.

### **Equipment**

The Engineering buildings are provided with lecture-rooms, recitation-rooms, drafting-rooms, laboratories, and shops for various phases of engineering work.

**Drafting-Rooms.** The drafting-rooms are equipped for practical work. The engineering student must provide himself with an approved drawing outfit, material, and books, the cost of which during the freshman year amounts to \$16.00 to \$20.00.

**Electrical Engineering Laboratory.** The equipment includes many of the various types of direct current and alternating current generators and motors, rotary converter, distribution transformers, control apparatus, and the measuring instruments essential to practical electrical testing. For experimental work, electrical power is obtained from engine-driven units and a turbine generator; a storage battery is used for constant voltage-testing.

Instruments are available for measuring the candle power of lamps and for the determination of illumination intensities. The standardizing laboratory apparatus includes primary and secondary standards used in calibrating laboratory instruments.

The telephone laboratory is equipped with apparatus for experimental work on magneto and common battery systems. Radio apparatus is available for student use as well as for experimental purposes.

**Mechanical Engineering Laboratory.** The apparatus consists of plain slide valve engines, steam turbine set, fans, pumps, indicators, gauges, feed water heaters, tachometers, injectors, flow meters, apparatus for determination of the B. T. U. in coal, gas, and liquid fuels, pyrometers, draft gauges, planimeters, thermometers, and other necessary apparatus and equipment for a mechanical laboratory.

**Materials Laboratory.** Apparatus and equipment are provided for making standard tests on various construction materials, such as steel, concrete, timber, and brick.

Equipment includes two 100,000-pound universal testing machines, cement-testing apparatus, extensometer and micrometer gauges, and other special devices for ascertaining the elastic properties of different materials.

Special apparatus which has been designed and made in the shops of the University is also made available for student work.

The College of Engineering owns a Beggs deformeter apparatus for the mechanical solution of stresses in structures by use of celluloid models.

**Research Laboratory.** Certain problems in highway research have been undertaken in coöperation with the State Roads Commission of Maryland and the U. S. Bureau of Public Roads. These studies have included traffic surveys over the Maryland State highway system, studies of cores cut from the State roads by means of a special core drilling apparatus, and laboratory studies of the elastic properties of concrete.

It is planned to continue and extend this type of coöperative research with departments of the State and the federal government as well as with the industries of Maryland.

**Machine Shops and Foundry.** The machine shops and foundry are well lighted and fully equipped. Shops for wood working, metal, forge, and foundry practice are provided.

The wood-working shop has full equipment of hand and power machinery.



The machine shops are equipped with various types of lathes, planers, milling machines, and drill presses.

The foundry is provided with an iron cupola, a brass furnace, and a coke oven.

The shop equipment not only furnishes practice, drill and instruction for students, but makes possible the complete production of special apparatus for conducting experimental and research work in engineering.

**Surveying Equipment.** Surveying equipment for plane topographic, and geodetic surveying is provided properly to equip several field parties. A wide variety of instruments is provided, including domestic as well as foreign makes.

**Special Models and Specimens.** A number of models illustrating various types of highway construction and highway bridges are available.

A wide variety of specimens of the more common minerals and rocks has been collected from various sections of the country, particularly from Maryland.

#### Engineering Library

In addition to the general University Library, each department maintains a library for reference, and receives the standard engineering magazines. The class work, particularly in advanced courses, requires that students consult special books of reference and current technical literature.

The Davis Library of Highway Engineering and Transport, founded by Dr. Charles H. Davis, President of the National Highways Association, is located in the Engineering Building. The many books, periodicals, pamphlets, and other items included in this library cover all phases of highway engineering, highway transportation, and highway traffic control.

There has also been donated to the College of Engineering the transportation library of the late J. Rowland Bibbins of Washington, D. C. The books and reports in this library deal with urban transportation problems, including railroads, street cars, subways, busses, and city planning.

The class work, particularly in advanced courses, requires that students consult special books of reference and current technical literature.

#### Curricula

The normal curriculum of each department is outlined on the following pages. Students are expected to attend and take part in the meetings of the student chapters of the technical engineering societies, and the courses of special lectures provided. The freshman engineering students are required to attend a series of non-technical lectures, the speakers, for the most part, being other than engineers. The student is required to submit a brief written summary of each lecture.

Junior and senior students with requisite standing may elect with the permission of the Dean of the College of Engineering, additional courses not exceeding three credits a semester.

All engineering students are urged to secure work during the summer, particularly in engineering fields.

The proximity of the University to Baltimore and Washington, and to other places where there are large industrial enterprises, offers an excellent opportunity for the engineering student to observe what is being done in his chosen field. An instructor accompanies students on all inspection trips, and the student is required to submit a written report of each trip.

#### Freshman Year

Alike for all engineering courses.

	Semester	
	I	II
Survey and Composition I (Eng. 1y).....	3	3
*Introduction to the Social Sciences (Soc. Sci. 1y).....	3	3
Reading and Speaking (Speech 1y).....	1	1
College Algebra (Math. 11f).....	3	—
Laboratory in Algebra (Math. 12f).....	1	—
Analytic Geometry (Math. 14s).....	—	3
Laboratory in Geometry (Math. 15s).....	—	1
General Chemistry (Chem. 1y).....	4	4
Engineering Drawing (Dr. 1f).....	2	—
Descriptive Geometry (Dr. 2s).....	—	2
Forge Practice (Shop 1s).....	—	1
Introduction to Engineering (Engr. 1f).....	1	—
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y) .....	1	1
Non-technical Lectures .....	—	—
	19	19

\*With permission of the Dean, the student may substitute a course in History or Modern Language of equal credit.

#### CIVIL ENGINEERING

Civil Engineering deals with the design, construction, and maintenance of highways, railroads, waterways, bridges, buildings, water supply and sewerage systems, harbor improvements, dams, and surveying and mapping.



### Sophomore Year

As revised to take effect in 1937-1938.

	Semester	
	I	II
*General European History (H. 1y).....	3	3
Oral Technical English (Speech 5f).....	2	—
Calculus (Math. 16y).....	3	3
Laboratory in Calculus (Math. 17y).....	1	1
General Physics (Phys. 2y).....	5	5
Descriptive Geometry (Dr. 3f).....	2	—
Statics and Dynamics (Mech. 1s).....	—	3
Plane Surveying (Surv. 2y).....	2	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y) .....	2	2
Engineering Lectures .....	—	—
	20	20

### Junior Year

As revised to take effect in 1937-1938.

Advanced Oral Technical English (Speech 6y).....	1	1
Fundamentals of Economics (Econ. 5s).....	—	3
Engineering Geology (Engr. 101f).....	2	—
Strength of Materials (Mech. 101f).....	5	—
Hydraulics (C. E. 101s).....	—	4
Materials of Engineering (Mech. 103s).....	—	2
Principles of Mechanical Engineering (M. E. 112f).....	3	—
Principles of Electrical Engineering (E. E. 101s) .....	—	3
Railroad Curves and Earthwork (C. E. 103f).....	3	—
Theory of Structures (C. E. 104s).....	—	5
Advanced Surveying (Surv. 101f).....	4	—
Technical Society .....	—	—
	18	18

### Senior Year

As revised to take effect in 1937-1938.

Advanced Oral Technical English (Speech 7y).....	1	1
Business Organization and Operation (Econ. 7f).....	2	—
Engineering Law and Specifications (Engr. 102s).....	—	2
Sanitary Bacteriology (Bact. 4s).....	—	1
Elements of Highways (C. E. 105f).....	3	—
Concrete Design (C. E. 106y).....	4	3
Structural Design (C. E. 107y).....	4	3
Municipal Sanitation (C. E. 108y).....	3	3
Thesis (C. E. 109y).....	1	2
Soils and Foundations (C. E. 110s).....	—	3
Technical Society .....	—	—
	18	18

\*With permission of the Dean, the student may substitute a course in English or Modern Language of equal credit.

## ELECTRICAL ENGINEERING

Electrical Engineering deals with the generation, transmission, and distribution of electrical energy; electrical transportation, communication, illumination, and manufacturing; and miscellaneous electrical applications in industry, commerce, and home life.

### Sophomore Year

As revised to take effect in 1937-1938.

	Semester	
	I	II
*General European History (H. 1y).....	3	3
Oral Technical English (Speech 5f).....	2	—
Calculus (Math. 16y).....	3	3
Laboratory in Calculus (Math. 17y).....	1	1
General Physics (Phys. 2y).....	5	5
Descriptive Geometry (Dr. 3f).....	2	—
Elements of Plane Surveying (Surv. 1f and s).....	1	—
Machine Shop Practice (Shop 2f).....	1	—
Elements of Electrical Engineering (E. E. 1s).....	—	3
Statics and Dynamics (Mech. 1s).....	—	3
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y) .....	2	2
Engineering Lectures .....	—	—
	20	20

### Junior Year

As revised to take effect in 1937-1938.

Advanced Oral Technical English (Speech 6y).....	1	1
Fundamentals of Economics (Econ. 5s).....	—	3
Differential Equations for Engineers (Math. 114f).....	3	—
Strength of Materials (Mech. 102f).....	4	—
Hydraulics (C. E. 102s).....	—	3
Materials of Engineering (Mech. 103s).....	—	2
Direct Currents (E. E. 103f).....	6	—
Direct Current Design (E. E. 104s).....	—	1
Electrical Measurements (E. E. 105f).....	4	—
Alternating Current Circuits (E. E. 106s).....	—	5
Thermodynamics (M. E. 103s).....	—	3
Technical Society .....	—	—
	18	18

\*With permission of the Dean, the student may substitute a course in English or Modern Language of equal credit.



### Senior Year

	Semester	
	I	II
As revised to take effect in 1937-1938.		
Advanced Oral Technical English (Speech 7y).....	1	1
Business Organization and Operation (Econ. 7f).....	2	—
Engineering Law and Specifications (Engr. 102s).....	—	2
Alternating Current Machinery (E. E. 107y).....	4	4
Alternating Current Design (E. E. 108f).....	1	—
Electrical Communications (E. E. 109y).....	3	3
Illumination (E. E. 110f).....	3	—
Electric Railways (E. E. 111f).....	3	—
Electric Power Transmission (E. E. 112s).....	—	3
Power Plants (M. E. 113s).....	—	3
Thesis (E. E. 113y).....	1	2
Technical Society .....	—	—
	18	18

### MECHANICAL ENGINEERING

Mechanical Engineering deals with the design, construction, and maintenance of machinery and power plants; heating, ventilation, and refrigeration; and the organization and operation of industrial plants.

### Sophomore Year

As revised to take effect in 1937-1938.		
*General European History (H. 1y).....	3	3
Oral Technical English (Speech 5f).....	2	—
Calculus (Math. 16y).....	3	3
Laboratory in Calculus (Math. 17y).....	1	1
General Physics (Phys. 2y).....	5	5
Descriptive Geometry (Dr. 3f).....	2	—
Elements of Plane Surveying (Surv. 1f and s).....	—	1
Machine Shop Practice (Shop 3f).....	2	—
Statics and Dynamics (Mech. 1s).....	—	3
Kinematics of Machinery (M. E. 1s).....	—	2
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y) .....	2	2
Engineering Lectures .....	—	—
	20	20

\*With permission of the Dean, the student may substitute a course in English or Modern Language of equal credit.

### Junior Year

	Semester	
	I	II
As revised to take effect in 1937-1938.		
Advanced Oral Technical English (Speech 6y).....	1	1
Fundamentals of Economics (Econ. 5s).....	—	3
Differential Equations for Engineers (Math. 114f).....	3	—
Elements of Chemical Engineering (Chem. 120f).....	3	—
Engineering Chemistry (Chem. 111s).....	—	3
Strength of Materials (Mech. 102f).....	4	—
Hydraulics (C. E. 102s).....	—	3
Materials of Engineering (Mech. 103s).....	—	2
Kinematics of Machinery (M. E. 101f).....	3	—
Machine Design (M. E. 102f).....	3	—
Machine Shop Practice (Shop 101f).....	1	—
Foundry Practice (Shop 102s).....	—	1
Thermodynamics (M. E. 104s).....	—	5
Technical Society .....	—	—
	18	18

### Senior Year

Advanced Oral Technical English (Speech 7y).....	1	1
Business Organization and Operation (Econ. 7f).....	2	—
Engineering Law and Specifications (Engr. 102s).....	—	2
Internal Combustion Engines (M. E. 105f).....	3	—
Heating and Ventilation (M. E. 106f).....	3	—
Refrigeration (M. E. 107s).....	—	3
Design of Prime Movers (M. E. 108y).....	3	3
Design of Power Plants (M. E. 109s).....	—	2
Principles of Electrical Engineering (E. E. 102y).....	4	4
Mechanical Laboratory (M. E. 110y).....	1	1
Thesis (M. E. 111y).....	1	2
Technical Society .....	—	—
	18	18



## COLLEGE OF HOME ECONOMICS

M. MARIE MOUNT, *Dean*

Home economics subjects are planned to meet the needs of the following classes of students: (1) those who desire a general knowledge of home economics without specializing in any one phase; (2) those who wish to teach home economics or to become extension specialists in home economics; (3) those who are interested in certain phases of home economics with the intention of becoming dietitians, restaurant and cafeteria managers, textile specialists, designers, buyers of clothing in department stores, or demonstrators for commercial firms.

### Departments

For administrative purposes the College of Home Economics is organized into the Departments of Foods and Nutrition; Textiles, Clothing, and Art; and Home and Institution Management.

### Facilities

The Home Economics Building is equipped with class rooms and laboratories. In addition the college maintains a home management house, in which students gain practical experience in home-making during their senior year.

Baltimore and Washington afford unusual opportunities for trips, additional study, and practical experience pertaining to the various phases of home economics.

### Degree

The degree of Bachelor of Science is conferred for the satisfactory completion of four years of prescribed courses, of 128 semester hours. In accordance with the University policy, not less than three-fourths of the credits for graduation must be earned with grades of A, B, or C.

### Prescribed Curricula

All students registered in the College of Home Economics follow the General Home Economics Curriculum for the first two years. At the beginning of the junior year a student may continue with the General Home Economics Curriculum, or elect one of the following special curricula, or a combination of curricula. A student who wishes to teach home economics may register in Home Economics Education in the College of Home Economics, or in the College of Education (see Home Economics Education).

Following are the outlines of the Curricula for General Home Economics, Textiles and Clothing, Foods and Nutrition, Institution Management, and Home Economics Extension.

## GENERAL HOME ECONOMICS

	Semester	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1 y).....	3	3
General Chemistry (Chem. 1 y).....	4	4
Textiles and Clothing (H. E. 11 f).....	3	—
Design (H. E. 21 s).....	—	3
Reading and Speaking (Speech 1 y).....	1	1
Physical Education (Phys. Ed. 2 y and 4 y).....	1	1
*Language or Electives.....	3	3
Home Economics Lectures.....	—	—
	15	15
<i>Sophomore Year</i>		
Costume Design (H. E. 24 f).....	3	—
Textiles and Clothing (H. E. 12 s).....	—	3
Elements of Organic Chemistry (Chem. 12 Ay and Chem. 12 B f or s).....	3	3
Foods (H. E. 31 y).....	3	3
Elementary Physics (Phys. 3 y).....	3	3
Physical Education (Phys. Ed. 6 y and 8 y).....	2	2
**Electives .....	3	3
	17	17
<i>Junior Year</i>		
Nutrition (H. E. 131 f).....	3	—
Dietetics (H. E. 132s).....	—	3
Management of the Home (H. E. 141 f and 142 s).....	3	3
Advanced Clothing (H. E. 111 f).....	3	—
Household Bacteriology (Bact. 3 s).....	—	3
Electives .....	8	8
	17	17
<i>Senior Year</i>		
Child Study (H. E. Ed. 102 f).....	4	—
Practice in Management of the Home (H. E. 143 f).....	4	—
Choice of one unit in Foods, Clothing, or Textiles.....	4	—
History of Architecture and Interior Decoration (H. E. 121 y).....	3	3
**Electives .....	—	12
	15	15

\* The language requirement may be waived for students entering with three or more years of a language.

\*\* In addition to the curriculum as prescribed, one course in each of the groups indicated below, is required:

economics; psychology; sociology; and one of the following sciences: zoology, botany, physiology, or genetics.



## INSTITUTION MANAGEMENT CURRICULUM

	Semester	
	I	II
<i>Junior Year</i>		
General Physiological Chemistry (Chem. 108 s).....	—	4
Household Bacteriology (Bact. 3 s).....	—	3
*Nutrition (H. E. 131 f).....	3	—
Dietetics (H. E. 132 s).....	—	3
Management of the Home (H. E. 141 f and 142 s).....	3	3
Institution Management (H. E. 144 y).....	3	3
Technic of Teaching (H. E. Ed. 5 s).....	—	2
Observation of Teaching (H. E. Ed. 6 s).....	—	1
Electives .....	8	—
	17	19

<i>Senior Year</i>		
Practice in Management of the Home (H. E. 143 f).....	4	—
Child Study (H. E. Ed. 102 f).....	4	—
Practice in Institution Management (H. E. 145 f).....	4	—
or		
Problems and Practice in Foods (H. E. 135 f).....		
Advanced Institution Management (H. E. 146 s).....	—	3
History of Architecture and Interior Decoration (H. E. 121 y)	3	3
Mental Hygiene (Ed. Psych. 105 s).....	—	3
Electives .....	—	6
	15	15

## HOME ECONOMICS EXTENSION CURRICULUM

<i>Junior Year</i>		
Nutrition (H. E. 131 f).....	3	—
Dietetics (H. E. 132s).....	—	3
Management of the Home (H. E. 141 f and 142 s).....	3	3
Advanced Clothing (H. E. 111 f).....	3	—
Household Bacteriology (Bact. 3 s).....	—	3
Educational Psychology (Ed. Psych. 1 f).....	3	—
Technic of Teaching (H. E. Ed. 5 s).....	—	2
Observation of Teaching (H. E. Ed. 6 s).....	—	1
Demonstrations (H. E. 133 f).....	2	—
Electives .....	3	5
	17	17

\* In addition to Nutrition and Dietetics (H. E. 131 f and 132 s), Child Nutrition (H. E. 136 s) or Seminar in Nutrition (H. E. 201 f or s) is recommended.

	Semester	
	I	II
<i>Senior Year</i>		
Child Study (H. E. Ed. 102 f).....	4	—
Practice in Management of the Home (H. E. 143 f).....	4	—
Problems and Practice in Foods (H. E. 135 f).....	4	—
History of Architecture and Interior Decoration (H. E. 121 y)	3	3
Mental Hygiene (Ed. Psych. 105 s).....	—	3
Human Physiology (Zool. 15 f).....	—	3
Methods in Home Economics Extension (H. E. 151 s).....	—	1
Applied Art (H. E. 122 s).....	—	2
Electives .....	—	—
	15	15

Fundamentals of Economics and Principles of Sociology are required in the sophomore year in the Home Economics Extension curriculum. Courses in Government and First Aid are recommended.

## TEXTILES AND CLOTHING CURRICULUM

<i>Junior Year</i>		
Household Bacteriology (Bact. 3 s).....	—	3
Nutrition (H. E. 131 f).....	3	—
Advanced Clothing (H. E. 111 f).....	3	—
Chemistry of Textiles (Chem. 14 s).....	—	3
Management of the Home (H. E. 141 f and 142 s).....	3	3
Advanced Textiles (H. E. 114 f).....	3	—
Electives .....	5	8
	17	17

<i>Senior Year</i>		
Practice in Management of the Home (H. E. 143 f).....	4	—
Child Study (H. E. Ed. 102 f).....	4	—
Problems and Practice in Textiles, Clothing, or Related Art (H. E. 113 f).....	4	—
History of Architecture and Interior Decoration (H. E. 121 y)	3	3
Advanced Design (H. E. 123 s).....	—	3
Special Clothing Problems (H. E. 112 s).....	—	6
Electives .....	—	—
	15	15



## FOODS CURRICULUM

	Semester	
	I	II
<i>Junior Year</i>		
General Physiological Chemistry (Chem. 108 s).....	—	4
Nutrition (H. E. 131 f).....	3	—
Dietetics (H. E. 132 s).....	—	3
Management of the Home (H. E. 141 f and 142 s).....	3	3
Demonstrations (H. E. 133 f).....	2	—
Household Bacteriology (Bact. 3 s).....	—	3
Electives .....	9	4
	—	—
	17	17
<i>Senior Year</i>		
Child Study (H. E. Ed. 102 f).....	4	—
Practice in Management of the Home (H. E. 143 f).....	4	—
Problems and Practice in Foods (H. E. 135 f).....	4	—
History of Architecture and Interior Decoration (H. E. 121 y).....	3	3
Advanced Foods (H. E. 134 s).....	—	3
Electives .....	—	9
	—	—
	15	15

## THE GRADUATE SCHOOL

C. O. APPLEMAN, *Dean*.

### The Graduate School Council

H. C. BYRD, LL.D., President of the University.  
 C. O. APPLEMAN, Ph.D., Dean of the Graduate School, Chairman.  
 M. MARIE MOUNT, M.A., Professor of Home and Institution Management.  
 H. J. PATTERSON, D.Sc., Director of the Agricultural Experiment Station.  
 W. S. SMALL, Ph.D., Professor of Education.  
 T. H. TALIAFERRO, C.E., Ph.D., Professor of Mathematics.  
 L. B. BROUGHTON, Ph.D., Professor of Chemistry.  
 E. N. CORY, Ph.D., Professor of Entomology.  
 H. F. COTTERMAN, Ph.D., Professor of Agricultural Education.  
 WM. H. FALLS, Ph.D., Professor of French.  
 H. C. HOUSE, Ph.D., Professor of English Language and Literature.  
 DEVOE MEADE, Ph.D., Professor of Animal and Dairy Husbandry.  
 MARVIN R. THOMPSON, Ph.C., Ph.D., Emerson Professor of Pharmacology  
 (Baltimore).  
 EDUARD UHLENHUTH, Ph.D., Professor of Gross Anatomy (Baltimore).

## General Information

### HISTORY AND ORGANIZATION

In the earlier years of the institution the Master's degree was frequently conferred, but the work of the graduate students was in charge of the departments concerned, under the supervision of the General Faculty. The Graduate School was established in 1918, and organized graduate instruction leading to both the Master's and the Doctor's degree was undertaken. The faculty of the Graduate School includes all members of the various faculties who give instruction in approved graduate courses. The general administrative functions of the Graduate Faculty are delegated to a Graduate Council, of which the Dean of the Graduate School is chairman.

### LIBRARIES

In addition to the resources of the University library, the great libraries of the National Capital are easily available for reference work. Because of the proximity of these libraries to College Park they are a valuable asset to research and graduate work at the University of Maryland.

The library building at College Park contains a number of seminar rooms and other desirable facilities for graduate work.



## GENERAL REGULATIONS

### ADMISSION

Graduates from a recognized college regarded as standard by the institution and by regional or general accrediting agencies are admitted to the Graduate School. The applicant shall present an official transcript of his college record, which for unconditional admission shall show creditable completion of an undergraduate major in the subject chosen for specialization in the Graduate School. Any deficiencies may be made up in courses without credit toward a graduate degree.

Application blanks for admission to the Graduate School are obtained from the office of the Dean. After approval of the application, a matriculation card, signed by the Dean, is issued to the student. This card permits one to register in the Graduate School. After payment of the fee, the matriculation card is stamped and returned. It is the student's certificate of membership in the Graduate School, and may be called for at any succeeding registration.

*Admission to the Graduate School does not necessarily imply admission to candidacy for an advanced degree.*

### REGISTRATION

All students pursuing graduate work in the University, even though they are not candidates for higher degrees, are required to register in the Graduate School at the beginning of each semester. Students taking graduate work in the Summer Session are also required to register in the Graduate School at the beginning of each session. In no case will graduate credit be given unless the student matriculates and registers in the Graduate School. Registration for the first semester is held in the Gymnasium-Armory on the dates designated in the calendar. Students register for the second semester and the summer session in the office of the Dean, T-214, Agriculture Building.

The program of work for the semester or the summer session is arranged with the major department and entered upon two course cards, which are signed first by the professor in charge of the student's major subject and then by the Dean of the Graduate School. One card is retained by the Dean. The student takes the other card, and, in case of a new student, also the matriculation card, to the Registrar's office, where registration is completed. After fees have been paid, class cards are issued by the Registrar. Students will not be admitted to graduate courses without class cards. Course cards may be obtained at the Registrar's office or at the Dean's office. The heads of departments usually keep a supply of these cards in their respective offices.

### GRADUATE COURSES

Graduate students must elect for credit in partial fulfillment of the requirements for higher degrees only courses designated *For Graduates*, or

*For Graduates and Advanced Undergraduates.* Graduate students may elect courses numbered from 1 to 99 in the general catalogue, but graduate credit will not be allowed for these. Students with inadequate preparation may be obliged to take some of these courses as prerequisites for advanced courses. No credit toward graduate degrees may be obtained by correspondence or extension study.

### PROGRAM OF WORK

The professor who is selected to direct a student's thesis work is the student's adviser in the formulation of a graduate program including suitable minor work, which is arranged in cooperation with the instructors. To encourage thoroughness in scholarship through application, graduate students in the regular sessions are limited to a program of thirty credit hours for the year, including thesis work, which is valued at not less than six hours.

### SUMMER GRADUATE WORK

Graduate work in the Summer Session may be counted as residence toward an advanced degree. By carrying approximately six semester hours of graduate work for four summer sessions, and upon submitting a satisfactory thesis, a student may be granted the degree of Master of Arts or Master of Science. In some instances a fifth summer may be required, in order that a satisfactory thesis may be completed.

Upon recommendation by the head of the student's major department, and with the approval of the Graduate Council, a maximum of six semester hours of graduate work done at other institutions of sufficiently high standing may be substituted for required work here; such substitution does not shorten the required residence period.

By special arrangement, graduate work may be pursued in some departments during the entire summer. Such students as graduate assistants, or others who may wish to supplement work done during the regular year, may satisfy one-third of an academic year's residence by full-time graduate work for eleven or twelve weeks, provided satisfactory supervision and facilities for summer work are available in their special fields.

The University publishes a special bulletin, giving full information concerning the Summer Session and the graduate courses offered therein. The bulletin is available upon application to the Registrar of the University.

### GRADUATE WORK IN PROFESSIONAL SCHOOLS AT BALTIMORE

Graduate courses and opportunities for research are offered in some of the professional schools at Baltimore. Students pursuing graduate work in the professional schools must register in the Graduate School, and meet the same requirements and proceed in the same way as do graduate students in other departments of the University.



## GRADUATE WORK BY SENIORS IN THIS UNIVERSITY

Seniors who have completed all their undergraduate courses in this University by the end of the first semester, and who continue their residence in the University for the remainder of the year, are permitted to register in the Graduate School and secure the privileges of its membership, even though the bachelor's degree is not conferred until the close of the year.

A senior of this University who has nearly completed the requirements for the undergraduate degree may, with the approval of his undergraduate dean and the Dean of the Graduate School, register in the undergraduate college for graduate courses, credits for which may be transferred toward an advanced degree at this University; but the total of undergraduate and graduate courses must not exceed fifteen credits for the semester. Graduate credits earned during the senior year may not be used to shorten the residence period required for advanced degrees.

### ADMISSION TO CANDIDACY FOR ADVANCED DEGREES

Application for admission to candidacy for either the Master's or the Doctor's degree is made on application blanks, which are obtained at the office of the Dean of the Graduate School. These are filled out in duplicate, and, after the required endorsements are obtained, the applications are acted upon by the Graduate Council. An official transcript of the candidate's undergraduate record and of any graduate courses completed at other institutions must be filed in the Dean's office before the application can be considered.

Admission to candidacy in no case assures the student of a degree, but merely signifies that he has met all the formal requirements and is considered by his instructors sufficiently prepared and able to pursue such graduate study and research as are demanded by the requirements of the degree sought. The candidate must show superior scholarship by the type of graduate work already completed.

Application for admission to candidacy is made at the time stated in the sections dealing with the requirements for the degree sought.

### REQUIREMENTS FOR THE DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE

**Advancement to Candidacy.** Each candidate for the Master's degree is required to make application for admission to candidacy not later than the date when instruction begins for the second semester of the academic year in which the degree is sought, but not until at least twelve semester course hours of graduate work have been completed. An average grade of B or above in all major and minor subjects is required.

**Residence Requirements.** Two semesters or four summer sessions may satisfy the residence requirements for the degree of Master of Arts or Master of Science. Inadequate preparation for the graduate courses the student wishes to pursue may make a longer period necessary.

**Course Requirements.** A minimum of twenty-four semester hours in courses approved for graduate credit is required for the Master's degree. If the student is inadequately prepared for the required graduate courses, in either the major or the minor subjects, additional courses may be required to supplement the undergraduate work. Not less than twelve semester hours and not more than fifteen semester hours in graduate courses must be earned in the major subject. The remaining credits of the total of twenty-four hours required must be outside the major subject, and they must comprise a group of coherent courses intended to supplement and support the major work. Not less than one-half of the total required course credits for the Master's degree, or a minimum of twelve, must be selected from courses numbered 200 or above. The entire course of study must constitute a unified program approved by the student's major adviser and by the Dean of the Graduate School. No credits that are reported with a grade lower than C are acceptable for an advanced degree.

At least eighteen of the twenty-four semester course credits required for the Master's degree must be taken at this institution. In certain cases graduate work done in other graduate schools of sufficiently high standing may be substituted for the remaining required credits, but any such substitution of credits does not shorten the normal required residence at the University of Maryland. Part time students are required to take the entire twenty-four semester course credits at this institution. The Graduate Council, upon recommendation of the head of the major department, passes upon all graduate work done at other institutions. The final examination will cover all graduate work offered in fulfillment of the requirements for the degree.

**Thesis.** In addition to the twenty-four semester hours in graduate courses a satisfactory thesis is required of all candidates for the Master's degree. It must demonstrate the student's ability to do independent work, and it must be acceptable in literary style and composition. It is assumed that the time devoted to thesis work will be not less than the equivalent of six semester hours earned in graduate courses. If the Master's thesis is based upon independent research, the student may register in research courses in the amount prescribed by his department, but not more than four semester hours in these may be included in the twenty-four semester hours required in graduate courses for the Master's degree. With the approval of the student's major professor and the Dean of the Graduate School, the thesis in certain cases may be prepared *in absentia* under direction and supervision of a member of the faculty of this institution.

The original copy of the thesis must be deposited in the office of the Graduate School not later than two weeks before Commencement. An abstract of the contents of the thesis, 200 to 250 words in length, must accompany it. A manual giving full directions for the physical make-up of the thesis is in the hands of each professor who directs thesis work, and should be consulted by the student before the typing of the manuscript is



begun. Individual copies of this manual may be obtained at the Dean's office at nominal cost.

**Final Examination.** The final oral examination is conducted by a committee appointed by the Dean of the Graduate School. The student's adviser acts as chairman of the committee. The other members are persons under whom the student has taken most of his major and minor courses. The chairman and the candidate are notified of the personnel of the examining committee at least one week prior to the period set for oral examinations. The chairman of the committee selects the exact time and place for the examination and notifies the other members of the committee and the candidate. The examination should be conducted within the dates specified, and a report of the committee sent to the Dean as soon as possible after the examination. A special form for this purpose is supplied to the chairman of the committee. Such a report is the basis upon which recommendation is made to the faculty that the candidate be granted the degree sought. The period for the oral examination is usually one hour.

The examining committee also approves the thesis, and it is the candidate's obligation to see that each member of the committee has ample opportunity to examine a copy of the thesis prior to the date of the examination.

A student will not be admitted to final examination until all other requirements for the degree have been met.

## REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

**Advancement to Candidacy.** Candidates for the Doctor's degree must be admitted to candidacy not later than one academic year prior to the granting of the degree. Applications for admission to candidacy for the Doctor's degree must be deposited in the office of the Dean not later than the first Wednesday in October of the academic year in which the degree is sought.

The applicant must have obtained from the head of the Department of Modern Languages a statement that he possesses a reading knowledge of French and German. Preliminary examinations or such other substantial tests as the departments may elect are also required for admission to candidacy.

**Residence.** Three years of full-time resident graduate study are required. The first two of the three years may be spent in other institutions offering standard graduate work. On a part-time basis the time needed will be correspondingly increased. The degree is not given merely as a certificate of residence and work, but is granted only upon sufficient evidence of high attainments in scholarship and ability to carry on independent research in the special field in which the major work is done.

**Major and Minor Subjects.** The candidate must select a major and one or two closely related minor subjects. Thirty semester hours of minor work are required. The remainder of the required residence is devoted to intensive study and research in the major field. The amount of required

course work in the major subject will vary with the department and the individual candidate.

**Thesis.** The ability to do independent research must be shown by a dissertation on some topic connected with the major subject. The original typewritten copy and one clear carbon copy of the thesis must be deposited in the office of the Dean at least three weeks before commencement. An abstract of the contents of the thesis, 200 to 250 words in length, must accompany it. A manual giving full directions for the physical make-up of the thesis is in the hands of each professor who directs thesis work, and should be consulted by the student before the typing of the manuscript is begun. Individual copies of this manual may be obtained at the Dean's office, at nominal cost. One or two extra copies of the thesis should be provided for use of members of the examining committee prior to the date of the final examination. The thesis is later printed in such form as the committee and the Dean may approve, and fifty copies are deposited in the University library.

**Final Examination.** The final oral examination is held before a committee appointed by the Dean. One member of this committee is a representative of the Graduate Faculty who is not directly concerned with the student's graduate work. One or more members of the committee may be persons from other institutions who are distinguished scholars in the student's major field.

The duration of the examination is approximately three hours, and covers the research of the candidate as embodied in his thesis, and his attainments in the fields of his major and minor subjects. The other detailed procedures are the same as those stated for the Master's examination.

## RULES GOVERNING LANGUAGE EXAMINATIONS FOR CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

1. A candidate for the Doctor's degree must show in a written examination that he possesses a reading knowledge of French and German. The passages to be translated will be taken from books and articles in his specialized field. Some 500 pages of text from which the applicant wishes to have his examination chosen should be submitted to the head of the Department of Modern Languages at least three days before the examination. It is not required that the candidate recognize every word of the text, but it is presumed that he will know sufficient grammar to distinguish inflectional forms, and that he will have a large enough vocabulary to give a good translation without the aid of a dictionary.

2. Application for admission to these tests must be filed in the office of the Dean of the Graduate School at least three days in advance of the tests.

3. No penalty is attached to failure in the examination, and the unsuccessful candidate is free to try again at the next date set for these tests.

4. Examinations are held in the Seminar room, Library building, on the first Wednesdays in February, June, and October, at 2 p. m.



## GRADUATE FEES

The fees paid by graduate students are as follows:

A matriculation fee of \$10.00. This is paid once only, upon admission to the Graduate School.

A fixed charge, each semester, at the rate of \$4.00 per semester credit hour.

A diploma fee (Master's degree), \$10.00.

A graduation fee, including hood (Doctor's degree), \$20.00.

## FELLOWSHIPS AND ASSISTANTSHIPS

**Fellowships.** A number of fellowships have been established by the University. A few industrial fellowships are also available in certain departments. The stipend for University fellows is \$400 for the academic year and the remission of all graduate fees except the diploma fee.

Application blanks for University fellowships may be obtained from the office of the Graduate School. The application, with the necessary credentials, is sent by the applicant directly to the Dean of the Graduate School.

Fellows are required to render minor services prescribed by their major departments. The usual amount of service required does not exceed twelve clock hours per week. Fellows are permitted to carry a full graduate program, and they may satisfy the residence requirement for higher degrees in the normal time.

The selection of fellows is made by the departments to which the fellowships are assigned, with the approval of the dean or director concerned, but all applications must first be approved by the Dean of the Graduate School. The awards of University fellowships are on a competitive basis.

**Graduate Assistantships.** A number of teaching and research graduate assistantships are available in several departments. The compensation for these assistantships is \$800 a year and the remission of all graduate fees except the diploma fee. Graduate assistants are appointed for one year and they are eligible to reappointment. The assistant in this class devotes one-half of his time to instruction or to research in connection with Experiment Station projects, and he is required to spend two years in residence for the Master's Degree. If he continues in residence for the Doctor's degree, he is allowed two-thirds residence credit for each academic year at this University. The minimum residence requirement from the Bachelor's degree, therefore, may be satisfied in four academic years and one summer, or three academic years and three summer sessions of eleven or twelve weeks each.

**Other Assistants.** Assistants not in the regular \$800 class are frequently allowed to take graduate courses if they are eligible for admission to the Graduate School. The stipend for these assistants varies with the services rendered, and it may or may not include the remission of graduate fees.

The question of fees is decided in each case by the dean or director concerned when the stipend is arranged. The amount of graduate work an assistant is permitted to carry is determined by the head of the department, with the approval of the dean or director concerned. The Graduate Council, guided by the recommendation of the student's advisory committee, prescribes the required residence in each case at the time the student is admitted to candidacy.

Further information regarding assistantships may be obtained from the department or college concerned.

## COMMENCEMENT

Attendance is required at the commencement at which the degree is conferred, unless the candidate is excused by the Dean of the Graduate School and the President of the University.



## SUMMER SESSION

WILLARD S. SMALL, *Director*

A Summer Session of six weeks is conducted at College Park. The program serves the needs of the following classes of students: (1) teachers and supervisors of the several classes of school work—elementary, secondary, vocational, and special; (2) regular students who are candidates for degrees; (3) graduate students; (4) special students not candidates for degrees.

### Terms of Admission

The admission requirements for those who desire to become candidates for degrees are the same as for any other session of the University. Before registering, a candidate for a degree will be required to consult the Dean of the College or School in which he wishes to secure the degree. Teachers and special students not seeking a degree are admitted to the courses of the summer session for which they are qualified. All such selection of courses must be approved by the Director of the Summer Session.

### Credits and Certificates

The semester hour is the unit of credit as in other sessions of the University. In the summer session, a course meeting five times a week for six weeks and requiring the standard amount of outside work has a value of two semester hours.

Courses satisfactorily completed will be credited by the State Department of Education towards satisfying certification requirements of all classes.

### Summer Graduate Work

For persons wishing to do graduate work towards an advanced degree in the summer sessions, special arrangements are made supplementing the regular procedure. Teachers and other graduate students working for a degree on the summer plan must meet the same requirements as to admission, credits, scholarship, and examinations as do students enrolled in the other sessions of the University.

*For detailed information in regard to the Summer Session, consult the special Summer Session announcement, issued annually in April.*

## DEPARTMENT OF MILITARY SCIENCE AND TACTICS

JOSEPH D. PATCH, *Lieut. Col. Infantry, U. S. Army, Professor*

### RESERVE OFFICERS' TRAINING CORPS

The work in this department is based upon the provisions of Army Regulations No. 145-10, War Department.

#### Authorization

An infantry unit of the Senior Division of the Reserve Officers' Training Corps was established at the University under the provisions of the Act of Congress of June 3, 1916, as amended.

#### Organization

The unit is organized as a regiment of three battalions of three rifle companies each, and a band. All units are commanded by Advanced Course students, who have been selected for these commands on a basis of merit. The course of instruction is divided into two parts: the Basic Course and the Advanced Course.

#### Objectives

##### \*Basic Course

The object of this course is to afford to students enjoying the privileges of State and Federal aided education an opportunity to be trained for positions involving leadership, within either the State or the nation. To this end the methods employed are designed to fit men mentally, physically, and morally for pursuits of peace or, if necessity requires, for national defense. A member of the R.O.T.C. is not in the Army of the United States, and membership in the unit carries no legal obligation to serve in the Army, or any of the armed forces.

##### \*\*Advanced Course

The primary object of the Advanced Course is to provide military instruction and systematic training through the agency of civil educational institutions to selected students, to the end that they may qualify as reserve officers in the military forces of the United States. It is intended to attain this objective during the time the students are pursuing their general or professional studies, thus causing minimum interference to the preparatory requirements of their projected civil careers.

A student prior to enrollment in this course must have satisfactorily completed the basic course and must have indicated in writing his desire to

\* Required of qualified students.

\*\* Elective for qualified students.



undertake the course. The applicant further must obtain on this document the recommendation of both the Dean of his College and the Professor of Military Science and Tactics, and submit same to the President of the Institution for approval. No student will be enrolled in the Advanced Course without the approval of the President of the University.

#### Time Allotted

For first and second years, basic course, three periods a week of not less than one hour each are devoted to this work, of which at least one hour is utilized for theoretical instruction.

For third and fourth years, advanced course, elective, five periods a week of not less than one hour each are devoted to this work, of which at least three periods are utilized for theoretical instruction.

#### Physical Training

Physical training forms an important part of military instruction, and it is the policy of the Military Department to encourage and support the physical training given by civilian teachers, thus coöperating in an effort to promote a vigorous manhood.

#### Physical Examination

All members of the Reserve Officers' Training Corps are required to be examined physically at least once after entering the University.

#### Uniforms

Members of the Reserve Officers' Training Corps must appear in proper uniform at all military formations and at such other times as the Professor of Military Science and Tactics may designate with the approval of the President of the University.

Uniforms, or commutation in lieu of uniforms, for the Reserve Officers' Training Corps, are furnished by the Government. The uniforms are the regulation uniforms of the United States Army, with certain distinguishing features; or, if commutation of uniforms is furnished, then such uniforms as may be adopted by the University. Such uniforms must be kept in good condition by the students. They remain the property of the Government; and, though intended primarily for use in connection with military instruction, may be worn at other times unless the regulations governing their use are violated. The uniform will not be worn in part nor used while the wearer is engaged in athletic sports other than those required as a part of the course of instruction. A Basic Course uniform which is furnished to a student by the Government will be returned to the Military Department at the end of the year; or before, if a student severs his connection with the Department. In case commutation of uniforms is furnished, the uniform so purchased becomes the property of the student upon completion of two years' work.

#### Commutation

Students who elect the Advanced Course and who have signed the contract with the Federal Government to continue in the Reserve Officers' Training Corps for the two remaining years of the Course are entitled to a small per diem money allowance, for commutation of subsistence, payable quarterly from and including the date of contact, until they complete the course at the institution.

#### Summer Camps

An important and excellent feature of the Reserve Officers' Training Corps is the summer camp. In specially selected parts of the country, camps are held for a period not exceeding six weeks for students who are members of the Advanced Course Reserve Officers' Training Corps. These camps are under the close and constant supervision of army officers, and are intended primarily to give a thorough and comprehensive practical course of instruction in the different arms of the service.

Parents may feel assured that their sons are carefully watched and safeguarded. Wholesome surroundings and associates, work and healthy recreation are the keynote to contentment. Social life is not neglected, and the morale branch exercises strict censorship over all social functions.

The attendance at summer camps is compulsory only for students who are taking the advanced course, which, as has been previously stated, is elective.

Students who attend the summer camps are under no expense. The Government furnishes transportation from the institution to the camp and from the camp to the institution, or to the student's home, unless the mileage is greater than that from the camp to the institution. In this case, the amount of mileage from the camp to the institution is allowed the student. Clothing, quarters, and food are furnished. The Advanced Course students, in addition to receiving quarters and food, are paid sixty cents for each day spent in camp. To obtain credit for camp a student must be in attendance at camp at least 85 per cent of the prescribed camp period.

#### Commissions

(a) Each year, upon completion of the Advanced Course, students qualified for commissions in the Reserve Officers' Corps will be selected by the head of the institution and the professor of Military Science and Tactics.

(b) The number to be selected from each institution and for each arm of the service will be determined by the War Department.

(c) The University of Maryland has received a rating from the War Department of "Generally Excellent" for the past several years. This rating indicates that the work of its R. O. T. C. unit has been recognized by the Federal Government as being of a superior order. The "Generally Excellent" rating supersedes the former designation of "Distinguished College," which designation has been discontinued by the War Department for institutions such as this University.



### Credits

Military instruction at this University is on a par with other university work, and the requirements of this department as to proficiency the same as those of other departments.

Students who have received military training at any educational institution under the direction of an army officer detailed as professor of military science and tactics may receive such credit as the professor of military science and tactics and the President may jointly determine.

### PHYSICAL EDUCATION, RECREATION, AND ATHLETICS

The purpose of the program of physical education at the University is broadly conceived as the development of the individual student. To accomplish this purpose, physical examinations and classification tests are given the incoming students to determine the relative physical fitness of each. Upon the basis of the needs disclosed by these tests, and individual preferences, students are assigned to the various activities of the program.

Freshmen and sophomores assigned to physical education take three activity classes each week throughout the year. In the fall, soccer, touch football, and tennis are the chief activities; in the winter, basketball, volleyball, and other team games; and in the spring, track, baseball, and tennis. In addition to these team activities, sophomore students may elect a considerable number of individual sports, such as fencing, boxing, wrestling, horse-shoes, ping pong, bag punching, and the like.

An adequate program of intramural sports is conducted, also. Touch football and soccer in the fall, basketball and volleyball in the winter, baseball and track in the spring, are the chief activities in this program. Plaques, medals, and appropriate awards in all tournaments of the program are provided for the winning teams and individual members.

Every afternoon of the school session the facilities of the Physical Education Department are thrown open to all students for free unorganized recreation. Touch football, soccer, basketball, basket shooting, apparatus work, fencing, boxing, wrestling, bag punching, tennis, badminton, and ping pong are the most popular contests engaged in.

The University is particularly fortunate in its possession of excellent facilities for carrying on the activities of the program of physical education. A large modern gymnasium, a new field house, a number of athletic fields, tennis courts, baseball diamonds, running tracks, and the like, and an athletic plant provided solely for the program of physical education conducted for the girls, constitute the major part of the equipment.

In addition to the activities described above, the University sponsors a full program of intercollegiate athletics for men. Competition is promoted in varsity and freshman football, basketball, baseball, track, boxing, lacrosse, and tennis, which are all major sports of this program. The University is a member of the Southern Conference, the National Collegiate Athletic Association, and other national organizations for the promotion of amateur athletics.

The University also maintains curricula designed to train men and women students to teach physical education and coach in the high schools of the State.

*For a description of the courses in Physical Education, see College of Education, and Section III, Description of Courses.*



## SCHOOL OF DENTISTRY

J. BEN ROBINSON, *Dean*.

### Faculty Council

GEORGE M. ANDERSON, D.D.S., F.A.C.D.  
ROBERT P. BAY, M.D., F.A.C.S.  
BRICE M. DORSEY, D.D.S.  
OREN H. GAVER, D.D.S., F.A.C.D.  
BURT B. IDE, D.D.S., F.A.C.D.  
ROBERT L. MITCHELL, Phar.D., M.D.  
ALEXANDER H. PATERSON, D.D.S., F.A.C.D.  
J. BEN ROBINSON, D.D.S., F.A.C.D.  
LEO A. WALZAK, D.D.S.

### HISTORY

The University of Maryland was organized December 28, 1807, as the College of Medicine of Maryland. On December 29, 1812, the University of Maryland charter was issued to the College of Medicine of Maryland. There were at that period but four medical schools in America—the University of Pennsylvania, founded in 1765; the College of Physicians and Surgeons of New York, in 1767; Harvard University, in 1782; and Dartmouth College, in 1797.

The first lectures on dentistry in America were delivered by Dr. Horace H. Hayden in the University of Maryland, School of Medicine, between the years 1821 and 1825. These lectures were interrupted in 1825 by internal dissension in the School of Medicine, but were continued in the year 1837. It was Dr. Hayden's idea that dentistry merited greater attention than had been given it by medical instruction, and he undertook to develop this specialty as a branch of medicine. With this thought in mind he, with the support of Dr. Chapin A. Harris, appealed to the Faculty of Physic of the University of Maryland for the creation of a department of dentistry as a part of the medical curriculum. The request having been refused, an independent college was decided upon. A charter was applied for and granted by the Maryland Legislature February 1, 1840. The first faculty meeting was held February 3, 1840, at which time Dr. H. H. Hayden was elected President and Dr. C. A. Harris, Dean. The introductory lecture was delivered by Dr. Harris on November 3, 1840, to the five students matriculated in the first class. Thus was the Baltimore College of Dental Surgery, the first and oldest dental school in the world, created as the foundation of the present dental profession.

In 1873, the Maryland Dental College, an offspring of the Baltimore College of Dental Surgery, was organized and continued instruction in dental

subjects until 1879, at which time it was consolidated with the Baltimore College of Dental Surgery. A department of dentistry was organized at the University of Maryland in the year 1882, graduating a class each year from 1883 to 1923. This school was chartered as a corporation and continued as a privately owned and directed institution until 1920, when it became a State institution. The Dental Department of the Baltimore Medical College was established in 1895, continuing until 1913, when it merged with the Dental Department of the University of Maryland.

The final combining of the dental educational interests of Baltimore was effected June 15, 1923, by the amalgamation of the student bodies of the Baltimore College of Dental Surgery and the University of Maryland, School of Dentistry, the Baltimore College of Dental Surgery becoming a distinct department of the State University under State supervision and control. Thus we find in the Baltimore College of Dental Surgery, Dental School, University of Maryland, a merging of the various efforts at dental education in Maryland. From these component elements have radiated developments of the art and science of dentistry until the strength of its alumni is second to none either in number or degree of service to the profession.

### BUILDING

The School of Dentistry now occupies its new building at the northwest corner of Lombard and Greene Streets, Baltimore, adjoining the University Hospital, being so situated that it offers opportunity for abundant clinic material. The new building provides approximately 45,000 square feet of floor space, is fireproof, and is ideally lighted and ventilated. A sufficient number of large lecture rooms and classrooms, a library and reading room, science laboratories, technic laboratories, clinic rooms, locker rooms, etc., are provided. The building is furnished with new equipment throughout with every accommodation necessary for satisfactory instruction under comfortable arrangements and pleasant surroundings. The large clinic wing accommodates one hundred and thirty-nine chairs. The following clinic departments have been provided: Operative, Prosthetic (including Crown and Bridge and Ceramics), Anesthesia and Surgery, Pathology, Orthodontia, Pedodontia, Radiodontia, and Photography. Modern units with electric engines have been installed in all clinics, while provision has been made for the use of electric equipment in all technic laboratories.

### COURSE OF INSTRUCTION

The Baltimore College of Dental Surgery, Dental School, University of Maryland offers a four-year course in dentistry devoted to instruction in the medical sciences, the dental sciences, the ancillary sciences, and clinical practice. Instruction consists of didactic lectures, laboratory instruction, demonstrations, conferences, and quizzes. Topics are assigned for collateral reading to train the student in the values and use of dental literature.



## REQUIREMENTS FOR MATRICULATION

Care is observed in selecting students to begin the study of dentistry, through a strict adherence to proved ability in secondary education and in the completion of prescribed courses in predental collegiate training. The requirements for admission and the academic regulations of the College of Arts and Sciences are strictly adhered to by the School of Dentistry.

### REQUIREMENTS FOR ADMISSION TO THE PREDENTAL COURSE

The requirement for admission is graduation from an accredited secondary school which requires for graduation a four-year course of not less than fifteen units. The equivalent in entrance examinations may be offered by a non-graduate of a secondary school.

**REQUIRED:** English (I, II, III, IV), 3 units; algebra to quadratics, 1 unit; plane geometry, 1 unit; history, 1 unit; science, 1 unit. Total 7 units.

**ELECTIVE:** Agriculture, astronomy, biology, botany, chemistry, civics, drawing, economics, general science, geology, history, home economics, vocational subjects, languages, mathematics, physical geography, physics, zoology, or any other subject offered in a standard high or preparatory school for which graduation credit is granted toward college or university entrance. Eight units must be submitted from this group.

### REQUIREMENTS FOR ADMISSION TO THE SCHOOL OF DENTISTRY

Applicants for admission to the dental curriculum must have completed successfully two years of work in an accredited college of arts and sciences. These credits must include not less than six semester hours each in English, Biology, and Physics, and twelve hours in Chemistry, including Organic Chemistry.

### APPLICATION PROCEDURE

Application blanks may be obtained from the office of the Dean. Each applicant should fill in this blank completely and mail it, together with the application fee and photographs, to the Director of Admissions, University of Maryland, Baltimore. The notes on the reverse side of the blank should be observed carefully.

A certificate of entrance will be issued to each qualified applicant.

## PREDENTAL CURRICULUM

	Semesters	
	I	II
<i>Freshman Year</i>		
Survey and Composition I (Eng. 1y).....	3	3
College Algebra (Math. 8f) or College Algebra and Trigonometry (Math. 11f).....	3	—
Plane Trigonometry and Analytic Geometry (Math. 10s) or Analytic Geometry (Math. 14s).....	—	3
General Chemistry (Chem. 1y).....	4	4
Reading and Speaking (Speech 1y).....	1	1
Invertebrate Morphology (Zool. 3f).....	4	—
Comparative Vertebrate Morphology (Zool. 4s).....	—	4
Mechanical Drawing (Dr. 4y).....	1	1
Basic R. O. T. C. (M. I. 1y) or Physical Education (Phys. Ed. 1y or 2y and 4y).....	1	1
Freshman Lectures .....	—	—
Total Semester Hours.....	17	17
<i>Sophomore Year</i>		
Elementary Organic Chemistry (Chem. 8Ay).....	2	2
Elementary Organic Laboratory (Chem. 8By).....	1	1
General Physics (Phys. 1y).....	4	4
French (French 1y or French 3y) or German (German 1y or German 3y).....	3	3
Electives (Humanities, Social Sciences).....	5	5
Basic R. O. T. C. (M. I. 2y) or Physical Education (Phys. Ed. 3y or 6y and 8y).....	2	2
Total Semester Hours.....	17	17

The equivalent of the above curriculum is offered in the Baltimore branch of the University.

### Fees for the Predental Course

Application fee (paid at time of filing application for admission)	\$2.00
Matriculation fee (paid at the time of enrollment).....	10.00
*Tuition for the session, resident student.....	200.00
*Tuition for the session, non-resident student.....	250.00
Laboratory fee (each session).....	20.00
Locker fee (each session).....	3.00
Laboratory breakage deposit (each session).....	5.00

\* Definition of residence given on page 57.



### Student Activity Fee—Special

For the purpose of administering and disciplining various student activities the student body has voted a fee of \$10.00 to be paid at the opening of the school year to the treasurer of the Student Activity Committee.

### Dental Curriculum

The curriculum is described in full in the bulletin of the School of Dentistry.

### Transfer Students

Applicants desiring to transfer from another recognized dental school must have had creditable records at the schools previously attended.

Applicants carrying conditions or failures in any year of their previous dental instruction will not be considered. All records must show an average grade of 5% over the passing mark of the schools in which the transfer credits were earned. Applicants whose records show habitual failures and conditions will not be considered for admission. The transferring student must satisfy all requirements for admission.

### Attendance Requirements

In order to receive credit for a full session, each student must have entered and be in attendance on the day the regular session opens, at which time lectures to all classes begin, and remain until the close of the session, the dates for which are announced in the calendar of the annual catalogue.

Regular attendance is demanded. Students with less than eighty-five per cent attendance in any course will be denied the privilege of final examination in any and all such courses. In certain unavoidable circumstances of absence the Dean may honor excuses, but students with less than eighty-five per cent attendance will not be promoted to the next succeeding class.

In cases of serious illness, as attested by a physician, students may register not later than the twentieth day following the advertised opening of the regular session. Students may register and enter not later than ten days after the beginning of the session, but such delinquency will be charged as absences from classes.

### Promotion

To be promoted to the next succeeding year students must have passed courses amounting to at least 80 per cent of the total schedule hours of the year, and must have an average of 80 per cent on all subjects passed.

A grade of 75 per cent is passing. A grade between 60 per cent and passing is a condition. A grade below 60 per cent is a failure. A condition may be removed by a reëxamination. In such effort, failure to make a passing mark is recorded as a failure in the course. A failure can be re-

moved only by repeating the course. Students with combined conditions and failures amounting to 40 per cent of the schedule hours of the year will not be permitted to proceed with their classes. Students carrying conditions will not be admitted to senior standing; students in all other classes may carry one condition to the next succeeding year. All conditions and failures must be removed within twelve months from the time at which they were incurred.

### Equipment

A complete list of necessary instruments and materials for technic and clinic courses, and text books for lecture courses will be announced for the various classes. Each student will be required to provide himself with whatever is necessary to meet the needs of his course, and present same to a responsible class officer for inspection. No student will be permitted to go on with his class who does not meet this requirement.

### Department

The profession of dentistry demands, and the School of Dentistry requires evidence of good moral character of its students. The conduct of the student in relation to his work and fellow students will indicate his fitness to be taken into the confidence of the community as a professional man. Integrity, sobriety, temperate habits, truthfulness, respect for authority and associates, and honesty in the transaction of business affairs as a student will be considered as evidence of good moral character necessary to the granting of a degree.

### Requirements for Graduation

The degree of Doctor of Dental Surgery is conferred upon a candidate who has met the following conditions:

1. A candidate must furnish documentary evidence that he has attained the age of 21 years.
2. A candidate for graduation shall have attended the full four-year course of study of the dental curriculum, the last year of which shall have been spent in this institution.
3. He will be required to show a general average of at least 80 per cent during the full course of study.
4. He shall have satisfied all technic and clinic requirements of the various departments.
5. He shall have paid all indebtedness to the college prior to the beginning of final examinations, and must have adjusted his financial obligations in the community satisfactorily to those to whom he may be indebted.



## FEES FOR THE DENTAL COURSE

Application fee (paid at time of filing formal application for admission) .....	\$2.00
Matriculation fee (paid at time of enrollment).....	10.00
*Tuition for the session, resident student.....	250.00
*Tuition for the session, non-resident student.....	350.00
Dissecting fee (first semester, freshman year).....	15.00
Laboratory fee (each session).....	20.00
Locker fee—freshman and sophomore years (first semester).....	3.00
Locker fee—junior and senior years (first semester).....	5.00
Laboratory breakage deposit—freshman and sophomore years (first semester) .....	5.00
Graduation fee (paid with second semester fees of senior year).....	15.00
Penalty fee for late registration.....	5.00
Examinations taken out of class and reexaminations.....	5.00
One certified transcript of record will be issued to each student free of charge. Each additional copy will be issued only on payment of	1.00

### Student Activity Fee—Special

For the purpose of administering and disciplining various student activities the student body has voted a fee of \$10.00 to be paid at the opening of the school year to the treasurer of the Student Activity Committee.

### Registration

The registration of a student in any school or college of the University shall be regarded as a registration in the University of Maryland, but when such student transfers to a professional school of the University or from one professional school to another, he must pay the usual matriculation fee required by each professional school.

A student who neglects or fails to register prior to or within the day or days specified for his school, will be called upon to pay a fine of \$5.00. The last day of registration with fine added to regular fees is Saturday at noon of the week in which instruction begins, following the specified registration period. (This rule may be waived only on the written recommendation of the Dean.)

Each student is required to fill in a registration card for the office of the Registrar, and pay to the Comptroller one-half of the tuition fee in addition to all other fees noted as payable first semester before being admitted to class work at the opening of the session. The remainder of tuition and second semester fees must be in the hands of the Comptroller on the registration day for the second semester.

According to the policy of the School of Dentistry no fees will be returned. In case the student discontinues his course, any fees paid will be credited to a subsequent course, but are not transferable.

The above requirements will be rigidly enforced.

\* Definition of residence given on page 57.

## Definition of Resident Status of Student

Students who are minors are considered to be resident students if, at the time of their registration their parents\* have been residents of this State for at least one year.

Adult students are considered to be resident students if, at the time of their registration, they have been residents of this state for at least one year; provided such residence has not been acquired while attending any school or college in Maryland.

The status of the residence of a student is determined at the time of his first registration in the University, and may not thereafter be changed by him unless, in the case of a minor, his parents\* move to and become legal residents of this state by maintaining such residence for at least one full calendar year. However, the right of the student (minor) to change from a non-resident to a resident status must be established by him prior to registration for a semester in any academic year.

### Summer Courses

Aside from and independent of the regular session, special courses are offered during the summer recess. The course in clinical instruction is conducted from June 1 to August 1 and from September 1 to 18 inclusive. The course is open only to students registered in the school. It offers opportunities to students carrying conditions in the clinic from the preceding session as well as those who desire to gain more extended practice during their training period. The clinics are under the direction of capable demonstrators, full credit being given for all work done.

### The Gorgas Odontological Society

The Gorgas Odontological Society was organized in 1916 as an honorary student dental society with scholarship as a basis for admission. The society is named after Dr. Ferdinand J. S. Gorgas, a pioneer in dental education, a teacher of many years experience, and during his life a great contributor to dental literature. It was with the idea of perpetuating his name that the society adopted it.

Students become eligible for membership at the beginning of their junior year if, during their preceding years of the dental course, they have attained a general average of 85 per cent or more in all of their studies. Meetings are held once each month, and are addressed by prominent dental and medical men, an effort being made to obtain speakers not connected with the University. The members have an opportunity, even while students, to hear men associated with other educational institutions.

\* The term "parents" includes persons who, by reason of death or other unusual circumstances, have been legally constituted the guardians of or stand in loco parentis to such minor students.



### Omicron Kappa Upsilon

Phi Chapter of Omicron Kappa Upsilon honorary dental fraternity was chartered at the Baltimore College of Dental Surgery, Dental School, University of Maryland, during the session of 1928-1929. Membership in the fraternity is awarded to a number not exceeding twelve per cent of the graduating class. This honor is conferred upon students who through their professional course of study creditably fulfill all obligations as students, and whose conduct, earnestness, evidence of good character, and high scholarship recommend them to election.

### Scholarship Loans

A number of scholarship loans from various organizations and educational foundations have been available to students in the School of Dentistry. These loans are offered on the basis of excellence in scholastic attainment and the need on the part of students for assistance in completing their course in dentistry. It has been the policy of the Faculty to recommend only students in the last two years for such privileges.

*The Henry Strong Educational Foundation*—From this fund, established under the will of General Henry Strong, of Chicago, an annual allotment is made to the Baltimore College of Dental Surgery, Dental School, University of Maryland, for scholarship loans available for the use of young men and women students under the age of twenty-five. Recommendations for the privileges of these loans are limited to students in the junior and senior years. Only students who through stress of circumstances require financial aid and who have demonstrated excellence in educational progress are considered in making nominations to the secretary of this fund.

*The Edward S. Gaylord Educational Endowment Fund*—Under a provision of the will of the late Dr. Edward S. Gaylord, of New Haven, Conn., an amount approximating \$16,000 was left to the Baltimore College of Dental Surgery, Dental School, University of Maryland, the proceeds of which are to be devoted to aiding worthy young men in securing dental education.

### Alumni Association

The first annual meeting of the Society of the Alumni of the Baltimore College of Dental Surgery was held in Baltimore, March 1, 1849. This organization has continued in existence to the present, its name having been changed to The National Alumni Association of the Baltimore College of Dental Surgery, Dental School, University of Maryland.

## THE SCHOOL OF LAW

ROGER HOWELL, *Dean*

### THE FACULTY COUNCIL

HON. HENRY D. HARLAN, A.M., LL.B., LL.D.  
RANDOLPH BARTON, JR., ESQ., A.B., LL.B.  
EDWIN T. DICKERSON, ESQ., A.M., LL.B.  
CHARLES MCHENRY HOWARD, ESQ., A.B., LL.B.  
HON. MORRIS A. SOPER, A.B., LL.B.  
HON. W. CALVIN CHESNUT, A.B., LL.B.  
G. RIDGELY SAPPINGTON, ESQ., LL.B.  
ROGER HOWELL, ESQ., A.B., Ph.D., LL.B.  
EDWIN G. W. RUGE, ESQ., A.B., LL.B.  
G. KENNETH REIBLICH, A.B., Ph.D., J.D.  
JOHN S. STRAHORN, JR., A.B., LL.B., S.J.D., J.S.D.

While the first faculty of law of the University of Maryland was chosen in 1813, and published in 1817 "A Course of Legal Study Addressed to Students and the Profession Generally," which the North American Review pronounced to be "by far the most perfect system for the study of law which has ever been offered to the public," and which recommended a course of study so comprehensive as to require for its completion six or seven years, no regular school of instruction in law was opened until 1823. The institution thus established was suspended in 1836 for lack of proper pecuniary support. In 1869 the School of Law was reorganized, and in 1870 regular instruction therein was again begun. From time to time the course has been made more comprehensive, and the staff of instructors increased in number. Its graduates now number more than three thousand, and included among them are a large proportion of the leaders of the Bench and Bar of the State and many who have attained prominence in the profession elsewhere.

The Law School has been recognized by the Council of the Section of Legal Education of the American Bar Association as meeting the standards of the American Bar Association, and has been placed upon its approved list.

The Law School is a member of the Association of American Law Schools, an association composed of the leading law schools in the United States, member schools being required to maintain certain high standards relating to entrance requirements, faculty, library, and curriculum.

The Law School is also registered as an approved school on the New York Regents' list.

The Law School Building, erected in 1931, is located at Redwood and Greene Streets in Baltimore. In addition to classrooms and offices for



the Law faculty, it contains a large auditorium, practice-court room, students' lounge and locker rooms, and the law library, the latter containing a collection of carefully selected text-books, English and American reports, leading legal periodicals, digests, and standard encyclopedias. No fee is charged for the use of the library, which is open from 9.00 A. M. to 10.30 P. M., except on Saturday, when it closes at 5.00 P. M.

#### Course of Instruction

The School of Law is divided into two divisions, the Day School and the Evening School. The same curriculum is offered in each school, and the standards of work and graduation requirements are the same.

The Day School course covers a period of three years of thirty-two weeks each, exclusive of holidays. The class sessions are held during the day, chiefly in the morning hours. The Practice Court sessions are held on Monday evenings from 8.00 to 10.00 P. M.

The Evening School course covers a period of four years of thirty-six weeks each, exclusive of holidays. The class sessions are held on Monday, Wednesday, and Friday evenings of each week from 6.30 to 9.30 P. M. This plan leaves the alternate evenings for study and preparation by the student.

The course of instruction in the School of Law is designed thoroughly to equip the student for the practice of his profession when he attains the Bar. Instruction is offered in the various branches of the common law, of equity, of the statute law of Maryland, and of the public law of the United States. The course of study embraces both the theory and practice of the law, and aims to give the student a broad view of the origin, development, and function of law, together with a thorough practical knowledge of its principles and their application. Analytical study is made of the principles of substantive and procedural law, and a carefully directed practice court enables the student to get an intimate working knowledge of procedure.

Special attention is given to the statutes in force in Maryland, and to any peculiarities of the law in that State, where there are such. All of the subjects upon which the applicant for the Bar in Maryland is examined are included in the curriculum. But the curriculum includes all of the more important branches of public and private law, and is well designed to prepare the student for admission to the Bar of other States.

#### Requirements for Admission

The requirements for admission are those of the Association of American Law Schools. Applicants for admission as candidates for a degree are required to produce evidence of the completion of at least two years of college work; that is, the completion of at least one-half the work acceptable for a Bachelor's degree granted on the basis of a four-year period of study by the University of Maryland or other principal college or university in this State.

To meet this requirement, a candidate for admission must present at least sixty semester hours (or their equivalent) of college work taken in an institution approved by standard regional accrediting agencies and exclusive of

credit earned in non-theory courses in military science, hygiene, domestic arts, physical education, vocal or instrumental music, or other courses without intellectual content of substantial value. Such pre-legal work must have been done in residence, no credit being allowed for work done in correspondence or extension courses, and must have been passed with a scholastic average at least equal to the average required for graduation in the institution attended.

In compliance with the rules of the Association of American Law Schools, a limited number of special students, not exceeding 10 per cent of the average number of students admitted as beginning regular law students during the two preceding years, applying for admission with less than the academic credit required of candidates for the law degree, may be admitted as candidates for the certificate of the school, but not for the degree, where, in the opinion of the Faculty Council, special circumstances, such as the maturity and apparent ability of the student, seem to justify a deviation from the rule requiring at least two years of college work. Such applicants must be at least twenty-three years of age and specially equipped by training and experience for the study of law.

#### Combined Program of Study Leading to the Degrees of Bachelor of Arts and Bachelor of Laws

The University offers a combined program in arts and law leading to the degrees of Bachelor of Arts and Bachelor of Laws.

Students pursuing this combined program in college and pre-legal subjects will spend the first three years in the College of Arts and Sciences at College Park. The fourth year they will register in the School of Law, and upon the successful completion of the work of the first year in the Day School, or the equivalent work in the Evening School, the degree of Bachelor of Arts will be awarded. The degree of Bachelor of Laws will be awarded upon the completion of the work prescribed for graduation in the School of Law.

Details of the combined course may be had upon application to the Registrar, University of Maryland, College Park, Md., or by reference to page 112.

#### Advanced Standing

Students complying with the requirements for admission to the school who have, in addition, successfully pursued the study of law elsewhere in a law school which is either a member of the Association of American Law Schools or approved by the American Bar Association, may, in the discretion of the Faculty Council, upon presentation of a certificate from such law school showing an honorable dismissal therefrom, and the successful completion of equivalent courses therein, covering at least as many hours as are required for such subjects in this school, receive credit for such



courses and be admitted to advanced standing. No credit will be given for study pursued in a law office, and no degree will be conferred until after one year of residence and study at this school.

#### Fees and Expenses

The charges for instruction are as follows:

Registration fee to accompany application.....	\$ 2.00
Matriculation fee, payable on first registration.....	10.00
Diploma fee, payable upon graduation.....	15.00
Tuition fee, per annum:	
Day School .....	\$200.00
Evening School .....	150.00

An additional tuition fee of \$50.00 per annum must be paid by students who are non-residents of the State of Maryland.

The tuition fee is payable in two equal instalments, one-half at the time of registration for the first semester, and one-half at the time of registration for the second semester.

Further information and a special catalogue of the School of Law may be had upon application to the School of Law, University of Maryland, Redwood and Greene Streets, Baltimore, Md.

## THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE AND COLLEGE OF PHYSICIANS AND SURGEONS

J. M. H. ROWLAND, *Dean*

#### MEDICAL COUNCIL

ARTHUR M. SHIPLEY, M.D., Sc.D.  
J. M. H. ROWLAND, M.D., Sc. D., LL.D.  
ALEXIUS MCGLANNAN, A.M., M.D., LL.D.  
HUGH R. SPENCER, M.D.  
H. BOYD WYLIE, M.D.  
CARL L. DAVIS, M.D.  
MAURICE C. PINCOFFS, S.B., M.D.  
FRANK W. HACHTEL, M.D.  
EDWARD UHLENHUTH, Ph.D.  
CLYDE A. CLAPP, M.D.  
JOHN C. KRANTZ, JR., Ph.D.  
WALTER D. WISE, M.D.  
MAGNUS GREGERSEN, M.A., Ph.D.  
J. MASON HUNDLEY, JR., M.A., M.D.

The School of Medicine of the University of Maryland is one of the oldest foundations for medical education in America, ranking fifth in point of age among the medical colleges of the United States. In the school building at Lombard and Greene Streets in Baltimore was founded one of the first medical libraries and the first medical college library in the United States.

Here for the first time in America dissecting was made a compulsory part of the curriculum; here instruction in Dentistry was first given (1837); and here were first installed independent chairs for the teaching of diseases of women and children (1867), and of eye and ear diseases (1873).

This School of Medicine was one of the first to provide for adequate clinical instruction by the erection in 1823 of its own hospital, and in this hospital intramural residency for senior students first was established.

#### Clinical Facilities

The University Hospital, property of the University, is the oldest institution for the care of the sick in Maryland. It was opened in September, 1823, and at that time consisted of four wards, one of which was reserved for eye cases.



Besides its own hospital, the School of Medicine has control of the clinical facilities of the Mercy Hospital, in which were treated last year 22,221 persons.

In connection with the University Hospital, an outdoor obstetrical clinic is conducted. During the past year 1,608 cases were treated in the Lying In Hospital and outdoor clinic.

The hospital now has about 400 beds—for medical, surgical, obstetrical, and special cases; and furnishes an excellent supply of clinical material for third-year and fourth-year students.

#### Dispensaries and Laboratories

The dispensaries associated with the University Hospital and Mercy Hospital are organized on a uniform plan in order that teaching may be the same in each. Each dispensary has departments of Medicine, Surgery, Obstetrics, Eye and Ear, Genito-Urinary, Gynecology, Gastro-Enterology, Cardiology, Pediatrics, Neurology, Orthopedics, Proctology, Dermatology, Throat and Nose, and Tuberculosis. All students in their junior year work two hours daily for ten weeks in one of these dispensaries; all students in the senior year work one hour each day; 117,490 cases were treated last year, which fact gives an idea of the value of these dispensaries for clinical teaching.

Laboratories conducted by the University purely for medical purposes are the Anatomical, Chemical, Experimental Physiology, Physiological Chemistry, Histology and Embryology, Pathology, Bacteriology and Immunology, Clinical Pathology, Pharmacology, and Operative Surgery.

#### Prizes and Scholarships

The following prizes and scholarships are offered in the School of Medicine. (For details see School of Medicine Bulletin.)

Faculty Medal; Dr. A. Bradley Gaither Prize; Dr. Samuel Leon Frank Scholarship; Hitchcock Scholarships; Randolph Winslow Scholarship; University Scholarships; Frederica Gehrmann Scholarship; Dr. Leo Karlinsky Memorial Scholarship; Clarence and Genevra Warfield Scholarships; Israel and Cecelia A. Cohen Scholarships.

#### Announcement of Changes in the Requirements for Matriculation

Beginning with the session of 1937-1938, and until further notice, the minimum requirements for matriculation in the School of Medicine will be:

(a) Graduation from an approved secondary school, or the equivalent in entrance examinations, and

\*(b) Three years of acceptable premedical credit earned in an approved college of arts and sciences. The quantity and quality of this pre-professional course of study shall be not less than that required for recommendation by the institution where the premedical courses are being studied.

\* For admission to the Premedical Curriculum the requirements are the same as for the freshman class in the College of Arts and Sciences of the University with the prescribed addition of two years of one foreign language. (See Section I, Entrance.)

The premedical curriculum shall include one-year courses, or their equivalents, in English, biology, inorganic chemistry, organic chemistry, physics, and French or German, and such elective courses as will complete a balanced three-year schedule of study.

The elective group should include a second course in English, scientific French or German (a reading knowledge of either language is desirable, although German is preferred), comparative vertebrate anatomy, embryology, histological technic, quantitative analysis, physical chemistry, economics, history, mathematics, political science, psychology, sociology, etc.

Thirty semester hours in the non-science courses (i. e., exclusive of biology, chemistry, physics, and mathematics) will make a balanced curriculum in the three-year schedule of study.

Wherever possible, a premedical student should complete a four-year curriculum and earn the baccalaureate degree.

In selecting candidates for admission, preference will be given to those applicants who have satisfactory high school and college records (including the ratio of science and non-science courses); acceptable scores in the Moss Aptitude Test (which is given each fall by the Association of American Medical Colleges in the institutions that are preparing students for medicine); the most favorable letters of recommendation from their respective premedical committees, or from one instructor in each of the departments of biology, chemistry, and physics; and who in all other respects give the most promise of becoming successful students and physicians of high standing.

*Applications for admission to the 1938-1939 class will be received beginning October 1, 1937. They will be considered in the order of their reception.*

#### Expenses

The following are the fees for students in the School of Medicine:

Matriculation	Resident	Non-Resident	Laboratory	Graduation
\$10.00 (only once)	\$400.00	\$600.00	\$25.00 (yearly)	\$15.00*

Estimated living expenses for students in Baltimore:

Items	Low	Average	Liberal
Books .....	\$50	\$75	\$100
College Incidentals .....	20	20	20
Board, eight months.....	200	250	275
Room rent .....	64	80	100
Clothing and Laundry.....	50	80	150
All other expenses.....	25	50	75
<b>Total.....</b>	<b>\$409</b>	<b>\$556</b>	<b>\$720</b>

\*The above tuition fees applicable until the end of the session 1936-1937 only. The right is reserved to make changes in these fees whenever the authorities deem them expedient.



## SCHOOL OF NURSING

ANNIE CRIGHTON, R.N., *Director and Superintendent of Nurses*

The University of Maryland School of Nursing was established in the year 1889. Since that time it has been an integral part of the University of Maryland Hospital.

The school is non-sectarian, the only religious services being morning prayers.

The University of Maryland Hospital is a general hospital containing about 400 beds. It is equipped to give young women a thorough course of instruction and practice in all phases of nursing, including experience in the operating room.

The school offers the student nurse unusual advantages in its opportunity for varied experience and in its thorough curriculum taught by well-qualified instructors and members of the medical staff of the University.

### Programs Offered

The program of study of the School is planned for two groups of students: (a) The three-year group; (b) the five-year group.

### Requirements for Admission

A candidate for admission to the School of Nursing must be a graduate of an accredited high school or other recognized preparatory school, and must present record showing that she has completed satisfactorily the required amount of preparatory study. Preference will be given to students who rank in the upper third of the graduating class in their respective preparatory schools.

Candidates are required to present 15 units for entrance: Required (7), and Elective (8).

Required: English (I, II, III, IV), 3 units; algebra to quadratics, 1 unit; plane geometry, 1 unit; history, 1 unit; science, 1 unit. Total, 7 units.

Elective: Astronomy, biology, botany, chemistry, civics, drawing, economics, general science, geology, history, home economics, vocational subjects, languages, mathematics, physical geography, physics, zoology, or any other subject offered in a standard high school or preparatory school for which graduation credit is granted toward college or university entrance. Eight units must be submitted from this group, of which not more than four units may pertain to vocational subjects.

In addition to the above, students must meet certain other definite requirements in regard to health, age, and personal fitness for nursing work.

The preferable age for students registering for the three-year course is 20 to 35 years, although students may be accepted at the age of 18. Women

of superior education and culture are given preference, provided they meet the requirements in other particulars. If possible, a personal interview with the Director of the School should be arranged on Tuesday or Friday from 11:00 A. M. to 12:00 M.

Blank certificates will be furnished upon application to the Director of the School of Nursing, University of Maryland Hospital, Baltimore, Maryland.

### Registration With Maryland State Board of Examiners of Nurses

By regulation of the Maryland State Board of Examiners of Nurses, all students entering schools of nursing in Maryland must, at the beginning of their course, register with the Board in order to be eligible for examination and license on completion of this course. Blanks necessary for this purpose will be sent with application forms. A fee of \$2 is charged for registration.

The fitness of the applicant for the work and the propriety of dismissing or retaining her at the end of her term of probation are left to the decision of the Director of the School. Misconduct, disobedience, insubordination, inefficiency, or neglect of duty are causes for dismissal at any time by the President of the University.

The requirements for admission to the five-year program of the School of Nursing are the same as for other colleges. (Special catalogue will be sent upon request.) The three-year program is designed to meet the requirements for the diploma in Nursing and comprises the work of the first, second, and third hospital years.

### Admission to the School

Students for the spring term are admitted in February and those for the fall term in September or October, and for the five-year course in September.

### Hours of Duty

During the preparatory period the students are engaged in class work for the first four months with no general duty in the hospital, and for the remainder of this period they are sent to the wards on eight-hour duty. During the first, second, and third years the students are on eight-hour day duty and nine-hour night duty with six hours on holidays and Sundays. The night-duty periods are approximately two months each with one day at the termination of each term for rest and recreation. The period of night duty is approximately five to six months during the three years.

The first four months of the preparatory period are devoted to theoretical instruction given entirely in the lecture and demonstration rooms of the training school, hospital, and medical school laboratories. The average number of hours per week in formal instruction, divided into lecture and laboratory periods, is 30 hours, and includes courses in anatomy, physiology, cookery and nutrition, dosage and solution, hygiene, bacteriology, chemistry, materia medica, practical nursing, bandaging, ethics, and history



of nursing. During the last two months of the probation period the students are placed on duty in the hospital wards for instruction in bedside nursing, and are expected to perform the duties assigned to them by the Director of the School. At the close of the first semester the students are required to pass both written and practical tests; failure to do so will be sufficient reason for terminating the course at this point.

#### **Sickness**

A physician is in attendance each day, and when ill, all students are cared for gratuitously. The time lost through illness in excess of two weeks, during the three years, must be made up. Should the authorities of the school decide that through the time lost the theoretical work has not been sufficiently covered to permit the student to continue in that year, it will be necessary for her to continue her work with the next class.

#### **Vacations**

Vacations are given between June and September. A period of four weeks is allowed the student at the completion of the first year and of the second year.

#### **Expenses**

A fee of \$50.00, payable on entrance, is required from each student. This will not be returned. A student receives her board, lodging, and a reasonable amount of laundry from the date of entrance. During her period of probation she provides her own uniforms, obtained through the hospital at a nominal cost. After being accepted as a student nurse, she wears the uniform supplied by the hospital. The student is also provided with textbooks and shoes. Her personal expenses during the course of training and instruction will depend entirely upon her individual habits and tastes.

### **THREE-YEAR PROGRAM**

#### **First Year**

The first year is divided into two periods: the first semester, or the preparatory period (6 months), and the second semester.

##### **First Semester**

In the first semester, or preparatory term, the student is given practical instruction in the following:

I. The making of hospital and surgical supplies, the cost of hospital material, apparatus, and surgical instruments.

II. Household economics and preparation of foods, particularly applied to invalid cooking and nutrition.

During this term the practical work is done under constant supervision, and teaching is given correlatively.

Excursions are made to filtration and sewerage plants, markets, hygienic dairies, linen rooms, laundry, and store room.

At the close of the first half of the first year the students are required to pass both written and oral tests, and failure to do so will be sufficient reason for terminating the course at this point.

#### **Subsequent Course**

The course of instruction, in addition to the first semester, or the preparatory period, occupies two and one-half years, and students are not accepted for a shorter period, except in special instances.

After entering the wards, the students are constantly engaged in practical work under the immediate supervision and direction of the head nurses and instructors.

Throughout the three years, regular courses of instruction and lectures are given by members of the medical and nursing school faculties.

#### **First Year**

##### **Second Semester**

During this period the students receive theoretical instruction in massage, general surgery, urinalysis and laboratory methods, diet in disease, and advanced nursing procedures.

Practical instruction is received in the male and female, medical, surgical, and children's wards.

#### **Second Year**

During this period the theoretical instruction includes pediatrics; general medicine; infectious diseases; obstetrics; gynecology; orthopedics; skin and venereal; eye, ear, nose, and throat; X-ray and radium; and dental. The practical work provides experience in the nursing of obstetrical and gynecological patients, in the operating rooms and the out-patient department.

#### **Third Year**

Theoretical instruction includes psychiatry, public sanitation, professional problems, and survey of the nursing field.

During this period the student receives short courses of lectures on subjects of special interest. These include a consideration of the work of institutions, of public and private charities, of settlements, and of the various branches of professional work in nursing.

Public Health experience is given in the Western Health District.



### **Attendance at Classes**

Attendance is required at all classes. Absences are excused by the Director of the School only in case of illness or absence from the school.

### **Examinations**

These are both written and oral, and include practical tests. The standing of the student is based upon the general character of work throughout the year as well as the results of the examinations. Students must pass upon all subjects of each year before entering upon the work of the following year.

### **Graduation**

The diploma of the school will be awarded to those who have completed satisfactorily the full term of three years and have passed the final examinations.

### **Scholarships**

One scholarship has been established by the Alumnae of the Training School, which entitles a nurse to a six-weeks course at Teachers College, Columbia University, New York. This scholarship is awarded at the close of the third year to the student whose work has been of the highest excellence, and who desires to pursue post-graduate study and special work. There are two scholarships of the value of \$50.00 each, known as the Edwin and Leander M. Zimmerman and the Elizabeth Collins Lee prizes. An Alumnae Pin is presented by the Woman's Auxiliary Board to a student who at the completion of three years shows marked executive ability. A prize of \$25.00 is given by Mrs. John L. Whitehurst to a student who at the completion of three years shows exceptional executive ability.

### **Five-Year Program**

In addition to the regular three-year course of training, the University offers a combined Academic and Nursing program leading to the degree of Bachelor of Science and a Diploma in Nursing.

The first two years of the course (or pre-hospital period), consisting of 68 semester hours, as shown on page 108 of this catalogue, are spent in the College of Arts and Sciences of the University, during which period the student has an introduction to the general cultural subjects which are considered fundamental in any college training. At least the latter of these two years must be spent in residence at College Park, in order that the student may have her share in the social and cultural activities of college life. The last three years are spent in the School of Nursing in Baltimore or in the Training School of Mercy Hospital, which is also affiliated with the School of Medicine of the University. In the fifth year of the combined program, certain elective courses such as public health nursing, nursing education, practical sociology, and educational psychology are arranged.

### **Degree and Diploma**

The Diploma in Nursing will be awarded to those who have completed satisfactorily the three-years' program.

The degree of Bachelor of Science and the Diploma in Nursing are awarded to students who complete successfully the prescribed combined academic and nursing program.



## SCHOOL OF PHARMACY

A. G. DU MEZ, *Dean*

### FACULTY COUNCIL

A. G. DU MEZ, Ph.G., B.S., M.S., Ph.D.  
WALTER H. HARTUNG, B.A., Ph.D.  
E. F. KELLY, Phar.D.  
MARVIN R. THOMPSON, Ph.G., B.S., Ph.D.  
J. CARLTON WOLF, B.Sc., Phar.D.  
B. OLIVE COLE, Phar.D., LL.B.  
H. E. WICH, Phar.D.

The School of Pharmacy began its existence as the Maryland College of Pharmacy. The latter was organized in 1841, and operated as an independent institution until 1904, when it amalgamated with the group of professional schools in Baltimore then known as the University of Maryland. It became a department of the present University when the old University of Maryland was merged with the Maryland State College in 1920. With but one short intermission, just prior to 1865, it has continuously exercised its function as a teaching institution.

### Location

The School of Pharmacy is located at Lombard and Greene Streets, in close proximity to the Schools of Medicine, Law, and Dentistry.

### AIMS

The School of Pharmacy provides systematic instruction in pharmacy, the collateral sciences, and such other subjects as are deemed to be essential in the education of a pharmacist. Its chief aim is to prepare its matriculants for the intelligent practice of dispensing pharmacy, but it also offers the facilities and instruction necessary for the attainment of proficiency in the practice of the other branches of the profession and in pharmaceutical research.

### Combined Curriculum in Pharmacy and Medicine

A combined curriculum has been arranged with the School of Medicine of the University by which students may obtain the degrees of Bachelor of Science in Pharmacy and Doctor of Medicine, in seven years. Students who successfully complete the first three years of the course in pharmacy and an additional four semester hours in zoology, and show that they are qualified by character and scholarship to enter the medical profession, are eligible for admission into the School of Medicine of the University; and upon the successful completion of the first two years of the medical course will be awarded the degree of Bachelor of Science in Pharmacy by the School of Pharmacy.

This privilege will be open only to students who maintain a uniformly good scholastic record during the first two years of the course in Pharmacy; and those who wish to avail themselves of it must so advise the School of Pharmacy before entering upon the work of the third year.

### Recognition

This school holds membership in the American Association of Colleges of Pharmacy. The object of the Association is to promote the interests of pharmaceutical education; and all institutions holding membership must maintain certain minimum requirements for entrance and graduation. Through the influence of this Association, uniform and higher standards of education have been adopted from time to time; and the fact that several States by law or by Board ruling recognize the standards of the Association is evidence of its influence.

The school is registered in the New York Department of Education, and its diploma is recognized in all States.

### REQUIREMENTS FOR ADMISSION

The requirement for admission is graduation from an accredited high or preparatory school which requires for graduation in a four-year course not less than 15 units of high-school work grouped as shown below. In case an applicant is not a graduate of a high or preparatory school, as defined above, the full equivalent of such education in each individual case must be established and attested by the highest public educational officer of the State.

UNITS FOR ENTRANCE: Required, 7; elective, 8; total, 15.

REQUIRED: English, (I, II, III, IV), 3 units; algebra to quadratics, 1 unit; plane geometry, 1 unit; history, 1 unit; science, 1 unit. Total, 7 units.

ELECTIVE: Agriculture, astronomy, biology, botany, chemistry, civics, drawing, economics, general science, geology, history, home economics, vocational subjects, languages, mathematics, physical geography, physics, zoology, or any other subject offered in a standard high or preparatory school for which graduation credit is granted toward college or university entrance. Eight units must be submitted from this group.

An application blank for admission may be had by applying to the office of the Dean. The form must be filled out in full with names of *all* schools attended, signed by the applicant and returned to the office of the Director of Admissions with two dollars investigation fee. Do not send diplomas or certificates. The Director of Admissions of the University of Maryland will secure all necessary credentials after the application has been received. Do not make application unless reasonably certain that preparation is sufficient, or unless intending to complete preparation if insufficient. Ample time should be allowed for securing credentials and investigating schools. If the applicant qualifies for the study of the profession, a certificate will be issued.



## REQUIREMENTS FOR ADVANCED STANDING

Students who present in addition to high-school requirements credit for subjects taken in schools of pharmacy holding membership in the American Association of Colleges of Pharmacy will be given credit for corresponding courses of equal length and content scheduled for the first three years of the course, provided they present a proper certificate of honorable dismissal.

Credit for general educational subjects will be given to students presenting evidence of having completed work equal in value to that outlined in this catalogue.

Transferring students in either case must satisfy the preliminary educational requirements outlined under Requirements for Admission.

## SPECIAL STUDENTS

An applicant who cannot furnish sufficient entrance credit and who does not care to make up the units in which he is deficient may enter as a special student and pursue all the branches of the curriculum, but will not be eligible for graduation, and will not receive a diploma. The School of Pharmacy reserves the right to decide whether or not the preliminary training of the applicant is sufficient.

## REQUIREMENTS FOR GRADUATION

Candidates for the degree of Bachelor of Science in Pharmacy (B. S. in Pharm.) must be of good moral character, and must have completed all of the prescribed work for that degree.

The work of the last year must be taken in this School.

The requirements for higher degrees are stated in the Graduate School Bulletin.

## MATRICULATION AND REGISTRATION

The matriculation ticket must be procured from the office of the School of Pharmacy, and must be taken out before one enters classes. After matriculation, all students are required to register at the office of the Director of Admissions. The last date of matriculation is Sept. 22, 1937.

### Expenses

Matriculation	Tuition		Laboratory and Breakage	Graduation
	Resident	Non-Resident		
\$10.00 (only once)	\$200.00	\$250.00	\$60.00 (yearly)	\$15.00

Tuition for the first semester and laboratory and breakage fee shall be paid to the Comptroller at the time of registration; and tuition for the second semester and graduation fee (the latter returned in case of failure) on or before Jan. 31, 1937.

A bulletin giving details of the course in Pharmacy may be obtained by addressing the School of Pharmacy, University of Maryland, Baltimore, Maryland.

## STATE BOARD OF AGRICULTURE

816 Fidelity Building, Baltimore, Maryland.

H. C. Byrd.....Executive Officer

F. K. Haszard.....Executive Secretary

The law provides that the personnel of the State Board of Agriculture shall be the same as the Board of Regents of the University of Maryland. The President of the University is the Executive Officer of the State Board of Agriculture.

**General Powers of Board:** The general powers of the Board as stated in Article 7 of the Laws of 1916, Chapter 391, are as follows:

"The State Board of Agriculture shall investigate the conditions surrounding the breeding, raising, and marketing of live stock and the products thereof, and contagious and infectious diseases affecting the same; the raising, distribution, and sale of farm, orchard, forest, and nursery products, generally, and plant diseases and injurious insects affecting the same; the preparation, manufacture, quality analysis, inspection, control, and distribution of animal and vegetable products, animal feeds, seeds, fertilizers, agricultural lime, agricultural and horticultural chemicals, and biological products; and shall secure information and statistics in relation thereto and publish such information, statistics, and the results of such investigations at such times and in such manner as to it shall seem best adapted to the efficient dissemination thereof; and except where such powers and duties are by law conferred or laid upon other boards, commissions, or officials, the State Board of Agriculture shall have general supervision, direction, and control of the herein recited matters, and generally of all matters in any way affecting or relating to the fostering, protection, and development of the agricultural interests of the State, including the encouragement of desirable immigration thereto, with power and authority to issue rules and regulations in respect thereof not in conflict with the Constitution and Laws of the State or the United States, which shall have the force and effect of law, and all violations of which shall be punished as misdemeanors are punished at common law; and where such powers and duties are by law conferred or laid on other governmental agencies may co-operate in the execution and performance thereof, and when so co-operating each shall be vested with such authority as is now or may hereafter by law be conferred on the other. The powers and duties herein recited shall be in addition to and not in limitation of any power and duties which now are or hereafter may be conferred or laid upon said board."

Under the above authority and by special legislation, all regulatory work is conducted under the general authority of the State Board. This includes the following services:



## LIVESTOCK SANITARY SERVICE

816 Fidelity Building, Baltimore, Maryland.

This Service has charge of regulatory work in connection with the control of animal and poultry diseases, such as bovine tuberculosis, Bang's Disease, hog cholera, encephalomyelitis, rabies, anthrax, blackleg, and scabies in animals; and pullorum disease and blackhead in poultry. The Service co-operates in these activities with the U. S. Department of Agriculture.

Well equipped laboratories for research, diagnostic work, and the examination of specimens, are maintained at College Park, and a branch laboratory for the convenience of persons residing in the Northern and Western parts of the State is maintained at Lombard and Greene Streets, Baltimore.

Mark Welsh.....State Veterinarian

## STATE HORTICULTURAL DEPARTMENT

College Park, Maryland.

The State Horticultural Law was enacted in 1898. It provides for the inspection of all nurseries and the suppression of injurious insects and diseases affecting plants of all kinds. The work of the department is conducted in close association with the departments of Entomology and Pathology of the University. The regulatory work is conducted under the authority of the law creating the department as well as the State Board of Agriculture. For administrative purposes, the department is placed under the Extension Service of the University on account of the close association of the work.

T. B. Symons.....Director of Extension Service

E. N. Cory.....State Entomologist

C. E. Temple.....State Pathologist

## FEED, FERTILIZER, AND LIME INSPECTION SERVICE

College Park, Maryland.

The Feed, Fertilizer, and Lime Inspection Service, a branch of the Chemistry Department of the University, enforces the State regulatory statutes controlling the purity and truthful labeling of all feeds, fertilizers, and limes that are offered or exposed for sale in Maryland.

L. B. Broughton.....State Chemist

L. E. Bopst.....Associate State Chemist

## SEED INSPECTION SERVICE

College Park, Maryland.

The Seed Inspection Service is placed by law under the general supervision of the Agricultural Experiment Station. This service takes samples of seed offered for sale, and tests them for quality and germination.

F. S. Holmes.....Seed Inspector

## STATE DEPARTMENT OF FORESTRY

1411 Fidelity Building, Baltimore, Maryland.

The Department of Forestry was created and organized to protect and develop the valuable forest resources of the State; to carry on a campaign of education; and to instruct counties, towns, corporations, and individuals as to the advantages and necessity of protecting from fire and other enemies the timber lands of the State. All correspondence and inquiries should be addressed to The State Forester, 1411 Fidelity Building, Baltimore.

Studies have been made of the timber resources of each of the twenty-three counties; and the statistics and information collected are published for free distribution, accompanied by a valuable timber map. The Department also administers six state forests, comprising about 5,000 acres. The Roadside Tree Law directs the Department of Forestry to care for trees growing within the right-of-way of any public highway in the State. A State Forest Nursery, established in 1914, is located at College Park.

F. W. Besley.....State Forester

## STATE WEATHER SERVICE

Edward B. Mathews.....Director

Johns Hopkins University, Baltimore, Maryland.

John R. Weeks.....Meteorologist

U. S. Custom House, Baltimore, Maryland.

The State Weather Service compiles local statistics regarding climatic conditions and disseminates information regarding the climatology of Maryland under the Regents of the University of Maryland through the State Geologist as successor to the Maryland State Weather Service Commission. The State Geologist is ex-officio Director, performing all the functions of former officers with the exception of Meteorologist, who is commissioned by the Governor and serves as liaison officer with the United States Weather Bureau. All activities except clerical are performed voluntarily.



## MARYLAND GEOLOGICAL SURVEY

Edward B. Mathews.....State Geologist  
Johns Hopkins University, Baltimore, Maryland.

The Geological and Economic Survey Commission is authorized under the general jurisdiction of the Board of Regents of the University of Maryland to conduct the work of this department. The State Geological and Economic Survey is authorized to make the following:

Topographic surveys showing the relief of the land, streams, roads, railways, houses, etc.

Geological surveys showing the distribution of the geological formations and mineral deposits of the State.

Agricultural soil surveys showing the areal extent and character of the different soils.

Hydrographic surveys to determine the available waters of the State for potable and industrial uses.

Magnetic surveys to determine the variation of the needle for land surveys.

A permanent exhibit of the mineral wealth of the State in the old Hall of Delegates at the State House, to which new materials are constantly added to keep the collection up-to-date.

## SECTION III

### Description Of Courses

*The courses of instruction described in this section are offered at College Park. Those offered in the Baltimore Schools are described in the separate announcements issued by the several schools.*

For the convenience of students in making out schedules of studies, the subjects in the following Description of Courses are arranged alphabetically:

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Courses for undergraduates are designated by the numbers 1-99; courses for advanced undergraduates and graduates, 100-199; courses for graduates, 200-299.

The letter following the number of the course indicates the semester in which the course is offered: thus, 1 f is offered the first semester; 1 s, the second semester; 1 y, the year. A capital S after a course number indicates that the course is offered in the summer session only.

The number of hours' credit is shown by the arabic numeral in parentheses after the title of the course.

A separate schedule of courses is issued each semester, giving the hours, places of meeting, and other information required by the student in making out his program. Students will obtain these schedules when they register.

Students are advised to consult the statements of the colleges and schools in Section II when making out their programs of studies; also Regulation of Studies, Section I.

### AGRICULTURAL ECONOMICS

PROFESSOR DEVAULT; ASSOCIATE PROFESSOR WALKER; ASSISTANT PROFESSOR RUSSELL; MR. HAMILTON.

A. E. 1 f. *Agricultural Industry and Resources* (3)—Two lectures; one laboratory. Open to sophomores.

A descriptive course dealing with agriculture as an industry and its relation to climate, physiography, soils, population centers and movements, commercial development, transportation, etc.; the existing agricultural resources of the world and their potentialities, commercial importance, and geographical distribution; the chief sources of consumption; the leading trade routes and markets for agricultural products. The history of American agriculture is briefly reviewed. Emphasis is upon the chief crop and livestock products of the United States.

A. E. 2 f. *Agricultural Economics* (3)—Three lectures. Prerequisite, Econ. 5 f or s.

A general course in agricultural economics, with special reference to population trend, agricultural wealth, land tenure, farm labor, agricultural credit, the tariff, price movements, and marketing.

### For Advanced Undergraduates and Graduates

A. E. 101 s. *Transportation of Farm Products* (3)—Two lectures; one laboratory.

A study of the development of transportation in the United States, and the different facilities for transporting farm products, with special attention to such problems as tariffs, rate structure, the development of fast freight lines, refrigerator service, truck transportation of agricultural products, and observation of transportation agencies in action. Not open to students who have taken or who are taking Econ. 112s. (Russell.)

A. E. 102 s. *Marketing of Farm Products* (3)—Three lectures. Prerequisite, Econ. 5 f or s.

A complete analysis of the present system of transporting, storing, and distributing farm products, and a basis for intelligent direction of effort in increasing the efficiency of marketing methods. (DeVault.)

A. E. 103 f. *Coöperation in Agriculture* (3)—Three lectures.

Historical and comparative development of farmers' coöperative organizations with some reference to farmer movements; reasons for failure and essentials to success; commodity developments; the Federal Farm Board; banks for coöperatives; present trends. (Russell.)

A. E. 104 s. *Agricultural Finance* (3)—Three lectures.

*Agricultural Credit* requirements; development and volume of business of institutions financing agriculture; financing specific farm organizations and industries. *Farm insurance*—fire, crop, livestock, and life insurance with special reference to mutual development—how provided, benefits, and needed extension. (Russell.)

A. E. 105 s. *Food Products Inspection* (3)—Two lectures; one laboratory.

This course, arranged by the Department of Agricultural Economics in coöperation with the State Department of Markets and the United States Department of Agriculture, is designed to give students primary instruction in the grading, standardizing, and inspection of fruits and vegetables, dairy products, poultry products, meats, and other food products. Theoretical instruction covering the fundamental principles will be given in the form of lectures, while the demonstrational and practical work will be conducted through laboratories and field trips to Washington, D. C., and Baltimore. (Staff.)

A. E. 106 s. *Prices* (3)—Two lectures; one laboratory.

A general course in prices, price relationships, and price analysis, with emphasis on prices of agricultural products. (Russell.)

A. E. 107 s. *Analysis of the Farm Business* (3)—One lecture; two laboratories.

A concise practical course in the keeping, summarizing, and analyzing of farm accounts. (Hamilton.)



A. E. 108 f. *Farm Organization and Operation* (3)—Three lectures.

A study of the organization and operation of Maryland farms from the standpoint of efficiency and profits. Students will be expected to make an analysis of the actual farm business and practices of different types of farms located in various parts of the State, and to make specific recommendations as to how these farms may be organized and operated as successful businesses. (Hamilton.)

A. E. 109 y. *Research Problems* (1-3).

With the permission of the instructor, students will work on any research problems in agricultural economics which they may choose, or a special list of subjects will be made up from which the students may select their research problems. There will be occasional class meetings for the purpose of making reports on progress of work, methods of approach, etc. (DeVault.)

A. E. 110 s. *Economics of Consumption* (2)—Two lectures.

Economic activity and organization viewed from the standpoint of the consumer. Covers among other subjects a study of consumption theory, including Engel's laws and demand curves, also practical information on standards of living, consumers' financial problems, grades of goods, brands and advertising, coöperative purchasing by consumers, and governmental consumer agencies. (Russell.)

#### For Graduates

A. E. 201 y. *Special Problems in Agricultural Economics* (3).

An advanced course dealing more extensively with some of the economic problems affecting the farmer; such as land problems, agricultural finance, farm wealth, agricultural prices, transportation, and special problems in marketing and coöperation. (DeVault.)

A. E. 202 y. *Seminar* (1-2).

This course will consist of special reports by students on current economic subjects, and a discussion and criticism of the same by the members of the class and the instructor. (DeVault.)

A. E. 203 y. *Research* (8).

Students will be assigned research in agricultural economics under the supervision of the instructor. The work will consist of original investigation in problems of agricultural economics, and the results will be presented in the form of theses. (DeVault.)

A. E. 210 s. *Taxation in Relation to Agriculture* (2)—Two lectures.

Principles and practices of taxation in their relation to agriculture, with special reference to the trends of tax levies, taxation in relation to land utilization, taxation in relation to ability to pay and benefits received; a comparison of the following taxes as they affect agriculture: general property tax, income tax, sales tax, gasoline and motor vehicle license taxes, inheritance tax, and special commodity taxes; possibilities of farm tax reduction through greater efficiency and economies in local government. (DeVault and Walker.)

A. E. 211 f. *Taxation in Theory and Practice* (3)—Two lectures; one laboratory period a week.

Ideals in taxation; economic effects of taxation upon the welfare of society; theory of taxation: the general property tax, business and license taxes, the income tax, the sales tax, special commodity taxes, inheritance and estate taxes; recent shifts in taxing methods and recent tax reforms; conflicts and duplication in taxation among governmental units; practical and current problems in taxation. (DeVault and Walker.)

A. E. 212 f. *Land Utilization and Agricultural Production* (3)—Two double lecture periods a week.

A presentation by regions of the basic physical conditions of the economic and social forces that have influenced agricultural settlement, and of the resultant utilization of the land and production of farm products; followed by a consideration of regional trends and interregional shifts in land utilization and agricultural production, and the outlook for further changes in each region. (Baker.)

A. E. 213 s. *Consumption of Farm Products and Standards of Living* (3)—Two double lecture periods a week.

A presentation of the trends in population and migration for the Nation and by States, of trends in exports of farm products and their regional significance, of trends in diet and in per capita consumption of non-food products; followed by a consideration of the factors that appear likely to influence these trends in the future, and of the outlook for commercial as contrasted with a more self-sufficing agriculture. (Baker.)

A. E. 214 f. *Advanced Coöperation* (2)—Two lectures.

Intensive study of specific phases of agricultural coöperation. (Russell.)

#### AGRICULTURAL ENGINEERING

PROFESSOR CARPENTER.

AGR. ENGR. 101 f. *Farm Machinery* (3)—Two lectures; one laboratory.

A study of the design and adjustments of modern horse- and tractor-drawn machinery. Laboratory work consists of detailed study of actual machines, their calibration, adjustment, and repair.

AGR. ENGR. 102 s. *Gas Engines, Tractors, and Automobiles* (3)—Two lectures; one laboratory.

A study of the design, operation, and repair of the various types of internal combustion engines used in farm practice.

AGR. ENGR. 104 f. *Farm Shop Work* (1)—One laboratory.

A study of practical farm shop exercises, offered primarily for prospective teachers of vocational agriculture.

AGR. ENGR. 105 f. *Farm Buildings* (2)—Two lectures.

A study of all types of farm structures; also of farm heating, lighting, water supply, and sanitation systems.



AGR. ENGR. 107 s. *Farm Drainage* (2)—One lecture; one laboratory.

A study of farm drainage systems, including theory of tile under-drainage, the depth and spacing of laterals, calculation of grades, and methods of construction. A smaller amount of time will be spent upon drainage by open ditches, and the laws relating thereto.

## AGRONOMY

### Division of Crops

PROFESSORS METZGER, KEMP; ASSOCIATE PROFESSOR EPPLEY.

AGRON. 1 f. *Cereal Crop Production* (3)—Two lectures; one laboratory.

History, distribution, adaptation, culture, improvement, and uses of cereal, forage, pasture, cover, and green manure crops.

AGRON. 2 s. *Forage Crop Production* (3)—Two lectures; one laboratory. Continuation of Agron. 1 f.

### For Advanced Undergraduates and Graduates

AGRON. 102 f. *Technology of Crop Quality* (2 or 3)—Students, other than those specializing in agronomy, may register for either half of the course. Part one (*Grading Farm Crops*)—one lecture; one laboratory. The market classifications and grades as recommended by the United States Bureau of Markets, and practice in determining grades. Part two (*Grain, Hay, and Seed Judging and Identification*)—one laboratory. (Eppley.)

AGRON. 103 f. *Crop Breeding* (2)—One lecture; one laboratory. Prerequisite, Gen. 101 f.

The principles of breeding as applied to field crops, and methods used in crop improvement. (Kemp.)

AGRON. 104 f and s. *Selected Crop Studies* (1-4)—Credit according to work done. This course is intended primarily to give an opportunity for advanced study of crop problems or crops of special interest to students. (Staff.)

AGRON. 121 s. *Methods of Crop and Soil Investigations* (2)—Two lectures.

A consideration of crop investigation methods at the various experiment stations, and the standardization of such methods. (Metzger.)

### For Graduates

AGRON. 201 y. *Crop Breeding* (4-10)—Credits determined by work accomplished.

The content of this course is similar to that of Agron. 103 f, but will be adapted more to graduate students, and more of a range will be allowed in choice of material to suit special cases. (Kemp.)

AGRON. 203 y. *Seminar* (2)—One report period each week.

The seminar is devoted largely to reports by students on current scientific publications dealing with problems in crops and soils.

AGRON. 209 y. *Research* (6-8)—Credit determined by work accomplished.

With the approval of the head of the department, the student will be allowed to work on any problem in agronomy, or he will be given a list of suggested problems from which he may make a selection. (Staff.)

### Division of Soils

PROFESSOR BRUCE; ASSOCIATE PROFESSOR THOMAS; LECTURER THOM.

SOILS 1 f and s. *Soils and Fertilizers* (3-5)—Three lectures; two two-hour laboratory periods. Prerequisites, Geol. 1 f, Chem. 1 y, Chem. 13 s, or registration in Chem. 13 s.

A study of the principles involved in soil formation and classification. The influence of physical, chemical, and biological activities on plant growth, together with the use of fertilizers in the maintenance of soil fertility. Lectures may be taken without the laboratory.

### For Advanced Undergraduates and Graduates

SOILS 102 s. *Soil Management* (3)—Two lectures; one laboratory. Prerequisite, Soils 1.

A study of the soil fertility systems of the United States, with special emphasis on the interrelation of total to available plant food, the balance of nutrients in the soil with reference to various cropping systems, and the economic and national aspect of permanent soil improvement. The practical work includes laboratory and greenhouse practice in soil improvement.

SOILS 103 f. *Soil Geography* (3)—Two lectures; one discussion period.

A study of the genealogy of soils, the principal soil regions of North America, and the classification of soils. Field trips will be made to emphasize certain important phases of the subject.

### For Graduates

SOILS 204 s. *Soil Micro-Biology* (3)—Two lectures; one laboratory. Prerequisite, Bact. 1.

A study of the micro-organisms of the soil in relation to fertility. It includes the study of the bacteria of the soil concerned in the decomposition of organic matter, nitrogen fixation, nitrification, and sulphur oxidation and reduction, and deals also with such organisms as fungi, algae, and protozoa.

The course includes a critical study of the methods used by experiment stations in soil investigational work. (Thom.)

SOILS 201 y. *Special Problems and Research* (10-12).

Original investigation of problems in soils and fertilizers. (Staff.)

SOILS 202 y. *Soil Technology* (7-5 f, 2 s)—Three lectures; two laboratories first semester; two lectures second semester. Prerequisites, Geol. 1, Soils 1, and Chem. 1.

In the first semester, chemical and physico-chemical study of soil problems as encountered in field, greenhouse, and laboratory. In the second semester, physical and plant nutritional problems related to the soil.

(Thomas.)



## ANIMAL HUSBANDRY

PROFESSORS IKELER, MEADE, CARMICHAEL; MR. VIAL.

A. H. 1 f. *General Animal Husbandry* (3)—Two lectures; one laboratory.

Place of livestock in the farm organization. General principles underlying efficient livestock management. Brief survey of types, breeds, and market classes of livestock, together with an insight into our meat supply.  
(Carmichael.)

A. H. 2 f. *Breeds of Live stock* (4)—Three lectures; one laboratory.

The origin, history, characteristics, and adaptability of the economic breeds of horses, cattle, sheep, and swine, with elementary judging practice. Students in this course will be required to fit and show an animal in the annual Students' Fitting and Showing Contest.  
(Ikeler, Carmichael.)

### For Advanced Undergraduates and Graduates

A. H. 100 s. *Classes and Grades of Live Stock* (3)—Two lectures; one laboratory.

Market classes and grades of live stock, the compilation of current market quotations, and the evaluation of animals for the commercial market.  
(Ikeler.)

A. H. 101 f. *Feeds and Feeding* (3)—Two lectures; one laboratory.

Elements of nutrition; source, characteristics, and adaptability of the various feeds to the several classes of livestock. Feeding standards, the calculation and compounding of rations.  
(Meade.)

A. H. 102 s. *Principles of Breeding* (3)—Two lectures; one laboratory.

This course covers the practical aspects of animal breeding, including heredity, variation, selection, development, systems of breeding, and pedigree work.  
(Meade.)

A. H. 103 f. *Livestock Management* (3)—Two lectures; one laboratory.

Instruction will be given in the care and management of beef cattle and horses, with training in the judging, fitting, and showing of these two types of farm stock. Students in this course will be required to fit and show an animal in the annual Students' Fitting and Showing Contest. When conflicts occur, students, with the consent of the instructor, may be allowed to register for the laboratory period only.  
(Carmichael, Vial.)

A. H. 104 f. *Livestock Management* (3)—Two lectures; one laboratory.

Same as A. H. 103 f. except that subject matter relates to swine and sheep.  
(Carmichael, Vial.)

A. H. 105 f. *Livestock Judging* (2)—Two laboratories.

Attention is given to the judging of horses, beef cattle, sheep, and swine. Critical study of individual animals is made, and extended practice in comparative judging given. Competitive judging is stressed, and teams to rep-

resent the University in livestock judging contests will be chosen from students taking this course.

A. H. 106 s. *Advanced Study of Breeds of Livestock* (3)—Two lectures; one laboratory.

A study of the historical background and development of breeds; outstanding individuals, families, and more prominent blood lines; advertising; public sales, and registration procedure.  
(Bogue.)

A. H. 107 f; 108 s. *Meat and Meat Packing* (2)—Two laboratory periods.

The slaughtering of meat animals; the handling of meat, and the process involved in the preparation, curing, and distribution of meat and its products.

A. H. 109 s. *Animal Nutrition* (3)—Three lectures.

A study of digestion, assimilation, metabolism, and protein and energy requirements. Methods of investigation and studies in the utilization of feed and nutrients.  
(Meade.)

### For Graduates

A. H. 201 y. *Special Problems in Animal Husbandry* (4-6).

Problems which relate specifically to the character of work the student is pursuing are assigned. Credit given in proportion to the amount and character of work completed.  
(Meade, Carmichael.)

A. H. 202 y. *Seminar* (2)—One lecture.

Students are required to prepare papers based upon their research for presentation before and discussion by the class.  
(Staff.)

A. H. 203 y. *Research*—Credit to be determined by the amount and character of work done.

With the approval of the head of the department, the student pursues original research in some phase of animal husbandry, carries the same to completion, and reports the results in the form of a thesis.  
(Meade, Carmichael.)

## ART

PROFESSOR MARTI

Art. 1 f. *Appreciation of Art I* (1)—One lecture and one hour of slide study.

An introduction to the figurative arts, and to the development of style. The material used will be taken chiefly from the history of occidental art, from Egypt to the Renaissance. Occasional visits to the museums in Washington and Baltimore. No prerequisite.

Art. 2 s. *Appreciation of Art II* (1)—One lecture and one hour of slide study.

Similar to Art 1 f. The material will be mainly European art from the Renaissance to the present. Occasional visits to museums. No prerequisite.



## ASTRONOMY

PROFESSOR T. H. TALIAFERRO

ASTR. 101 y. *Astronomy* (4)—Two lectures. Elective, but open only to juniors and seniors.

An elementary course in descriptive astronomy. (Taliaferro.)  
(Not given in 1937-1938.)

## BACTERIOLOGY AND PATHOLOGY\*

PROFESSORS JAMES, REED, BLACK; MR. FABER, DR. BARTRAM, MR. PELCZAR.

### A. Bacteriology

BACT. 1 f or s. *General Bacteriology* (4)—Two lectures; two laboratories. Sophomore year.

A brief history of bacteriology; microscopy; bacteria and their relation to nature; morphology; classification; metabolism; bacterial enzymes; application to water, milk, foods, and soils; relation to the industries and to diseases. Preparation of culture media; sterilization and disinfection; microscopic and macroscopic examination of bacteria; isolation, cultivation, and identification of aerobic and anaerobic bacteria; effects of physical and chemical agents; microbiological examinations.

BACT. 1 A f or s. *General Bacteriology* (2)—Two lectures. Sophomore year. Prerequisite, consent of instructor.

This course consists of the lectures only of Bact. 1.

BACT. 2 s. *Pathogenic Bacteriology* (4)—Two lectures; two laboratories. Sophomore year. Prerequisite, Bact. 1. Registration limited.

Principles of infection and immunity; characteristics of pathogenic microorganisms. Isolation and identification of bacteria from pathogenic material; effects of pathogens and their products.

BACT. 2 A s. *Pathogenic Bacteriology* (2)—Two lectures. Sophomore year. Prerequisite, Bact. 1 and consent of instructor.

This course consists of the lectures only of Bact. 2 s.

BACT. 3 s. *Household Bacteriology* (3)—One lecture; two laboratories. Junior year. Home Economics students only.

A brief history of bacteriology; bacterial morphology, classification, and metabolism; their relation to water, milk, dairy products, and other foods; infection and immunity; personal, home, and community hygiene.

BACT. 4 s. *Sanitary Bacteriology* (1)—One lecture. Senior year. Engineering students only.

Bacteria and their application to water purification and sewage disposal.

\* One or more of the scheduled courses for advanced undergraduates and graduates may be given during the evening, if a sufficient number of students register. A special fee is charged.

## For Advanced Undergraduates and Graduates

BACT. 101 f. *Dairy Bacteriology* (3)—One lecture; two laboratories. Junior year. Prerequisite, Bact. 1. Registration limited.

Bacteria in milk, sources and development; milk fermentation; sanitary production; care and sterilization of equipment; care and preservation of milk and cream; pasteurization; public health requirements. Standard methods of milk analysis; practice in the bacteriological control of milk supplies and plant sanitation; occasional inspection trips. (Black.)

BACT. 102 s. *Dairy Bacteriology (Continued)* (3)—One lecture; two laboratories. Junior year. Prerequisite, Bact. 101 f or Bact. 1 and consent of instructor.

Relation of bacteria, yeasts, and molds to cream, concentrated milks, starters, fermented milks, ice cream, butter, cheese, and other dairy products; sources of contamination. Microbiological analysis and control; occasional inspection trips. (Black.)

BACT. 111 f. *Food Bacteriology* (3)—One lecture; two laboratories. Junior year. Prerequisite, Bact. 1 and consent of instructor.

Bacteria, yeasts, and molds in foods; relation to preservation and spoilage; sanitary production and handling; food regulations; food infections and intoxications. Microbiological examination of normal and spoiled foods; factors affecting preservation. Offered alternate years, alternating with Bact. 125 f. (Bartram.)

BACT. 112 s. *Sanitary Bacteriology* (3)—One lecture; two laboratories. Junior year. Prerequisite, Bact. 1. Registration limited.

Bacteriological and public health aspects of water supplies and water purification; swimming pool sanitation; sewage disposal, industrial wastes; disposal of garbage and refuse; municipal sanitation. Practice in standard methods for examination of water and sewage; differentiation and significance of the coli-aerogenes group; other bacteriological analyses. (Bartram.)

BACT. 115 f. *Serology* (4)—Two lectures; two laboratories. Junior year. Prerequisite, Bact. 2 s or consent of instructor. Registration limited.

Infection and resistance; agglutination, precipitation, lytic and complement fixation reactions; principles of immunity and hypersensitiveness. Preparation of necessary reagents; general immunologic technic; factors affecting reactions; applications in the identification of bacteria and diagnosis of disease. (Faber.)

BACT. 116 s. *Epidemiology* (2)—Two lectures. Junior year. Prerequisite, Bact. 1.

Epidemiology of important infectious diseases, including history, characteristic features, methods of transmission, immunization and control; periodicity; principles of investigation; public health applications. Offered alternate years, alternating with Bact. 126 s. (Faber.)



BACT. 121 f. *Research Methods* (1)—One lecture. Senior year. Prerequisite, Bact. 1 and consent of instructor.

Methods of research; library practice; current literature; preparation of papers; research institutions, investigators; laboratory design, equipment and supplies; academic practices; professional aids. (Black.)

BACT. 122 f or s. *Advanced Methods* (2)—One lecture; one laboratory. Senior year. Prerequisite, Bact. 1 and consent of instructor. Registration limited.

Microscopy, dark field and single cell technic, photomicrography; colorimetric and potentiometric determinations; oxidation-reduction, electrophoresis; surface tension; gas analysis; special culture methods; filtration; animal care; practice in media and reagent preparation. (Bartram.)

BACT. 123 f. *Bacteriological Problems* (2-3)—Laboratory. Senior year. Prerequisite, Bact. 1 and any other courses needed for the projects. Registration limited.

Subject matter suitable to the needs of the particular student or problems as an introduction to research will be arranged. The research is intended to develop the student's initiative. The problems are to be selected, outlined, and investigated in consultation with and under the supervision of a member of the department. Results are to be presented in the form of a thesis. (Black.)

BACT. 124 s. *Bacteriological Problems (Continued)* (2-3)—Laboratory. Senior year. Prerequisite, Bact. 1 and any other courses needed for the projects. Registration limited. (Black.)

BACT. 126 s. *Public Health* (1)—One lecture. Senior year. Bact. 1 desirable.

A series of weekly lectures on public health and its administration, by the staff members of the Maryland State Department of Health, representing each of the bureaus and divisions. Offered alternate years, alternating with Bact. 116 s. (Not given in 1937-1938.) (James, in charge.)

BACT. 127 f. *Advanced Bacteriology* (2)—Two lectures. Senior year. Prerequisite, Bact. 1 and consent of instructor.

History; genetic relationships; special morphology; bacterial variation; growth; chemical composition; action of chemical and physical agents; systematic bacteriology, classification, review of important genera. (Black.)

BACT. 128 s. *Bacterial Metabolism* (2)—Two lectures. Senior year. Prerequisite, Bact. 1, Chem. 12 f or equivalent, and consent of instructor.

Oxygen relations; enzymes; bacterial metabolism and respiration; chemical activities of microorganisms; changes produced in inorganic and organic compounds; industrial fermentations. Offered alternate years, alternating with Bact. 206 s. (Black.)

BACT. 131 f. *Journal Club* (1). Senior year. Prerequisites, Bact. 1 and at least one of the advanced courses.

Students will submit reports on current scientific literature or on individual problems in bacteriology, which will be discussed and criticised by members of the class and staff. (Black.)

BACT. 132 s. *Journal Club (Continued)* (1). Senior year. Prerequisites, Bact. 1 and at least one of the advanced courses. (Black.)

#### For Graduates

BACT. 201 f. *Advanced General Bacteriology* (3)—One lecture; two laboratories. Prerequisite, degree in biological sciences and consent of instructor. Students with credit in an approved elementary course will not receive credit for this course.

History; microscopy; morphology; classification; metabolism; relation to industries and to diseases. Media preparation; examination of bacteria; staining; cultivation and identification of bacteria. Minor credit will not be given for Bact. 201 f unless Bact. 202 s is satisfactorily completed. (Faber.)

BACT. 202 s. *Advanced Pathogenic Bacteriology* (3)—One lecture; two laboratories. Prerequisite, Bact. 1 or 201 f or equivalent. Registration limited.

Infection and immunity; pathogenic microorganisms. Isolation, identification, and effects of pathogens. (Faber.)

BACT. 206 s. *Physiology of Bacteria* (2)—Two lectures. Prerequisite, Bact., 10 hours and Chem. 108 s or equivalent.

Growth; chemical composition; physical characteristics; energy relationships; influence of environmental conditions on growth and metabolism; disinfection; physiological interrelationships; changes occurring in media. Offered alternate years, alternating with Bact. 128 s. (Not given in 1937-1938.) (James.)

BACT. 207 f. *Special Topics* (1). Prerequisite, Bact., 10 hours.

Presentation and discussion of fundamental problems and special subjects. (Black.)

BACT. 208 s. *Special Topics (Continued)* (1). Prerequisite, Bact., 10 hours. (Black.)

BACT. 215 f or s. *Food Sanitation* (2)—Two lectures. Prerequisite, Bact. 1 f or s, Bact. 2 s, and Bact. 111 f, or their equivalent.

Principles of sanitation in food manufacture and distribution; methods of control of sanitation in commercial canning, pickling, bottling, preserving, refrigeration, dehydration, etc. (James.)



BACT. 221 f. *Research* (1-6)—Laboratory. Prerequisites, Bact. 1 and any other courses needed for the particular projects. Credit will be determined by the amount and character of the work accomplished.

Properly qualified students will be admitted upon approval of the department head and with his approval the student may select the subject for research. The investigation is outlined in consultation with and pursued under supervision of a faculty member of the department. The results obtained by a major student working towards an advanced degree are presented as a thesis, a copy of which must be filed with the department.

(James, Black.)

BACT. 222 s. *Research (Continued)* (1-6) — Laboratory. Prerequisites, Bact. 1 and any other courses needed for the particular projects.

(James, Black.)

BACT. 231 f. *Seminar* (1). Prerequisite, Bact., 10 hours and consent of instructor.

Conferences and reports prepared by the student on current research and recent advances in bacteriology.

(James.)

BACT. 232 s. *Seminar (Continued)* (1). Prerequisite, Bact., 10 hours and consent of instructor.

(James.)

#### B. Pathology

##### For Advanced Undergraduates and Graduates

BACT. 103 f. *Hematology* (2)—Two laboratories. Junior year. Bact. 1 desirable.

Procuring blood; estimating the amount of hemoglobin; color index; study of red cells and leucocytes in fresh and stained preparations; numerical count of erythrocytes and leucocytes; differential count of leucocytes; sources and development of the formed elements of blood; pathological forms and counts.

(Reed.)

BACT. 104 s. *Urinalysis* (2)—Two laboratories. Junior year. Bact. 1 desirable.

Physiologic, pathologic, and diagnostic significance; use of clinical methods and interpretation of results.

(Reed.)

BACT. 105 f. *Comparative Anatomy and Physiology* (3)—Three lectures. Junior year.

Structure of the animal body; abnormal as contrasted with normal; the interrelationship between the various organs and parts as to structure and function.

(Reed.)

BACT. 106 s. *Animal Hygiene* (3)—Three lectures or demonstrations. Junior year.

Care and management of domestic animals, with special reference to maintenance of health and resistance to disease; prevention and early recognition of disease; general hygiene; sanitation; first aid.

(Reed.)

BACT. 109 f. *Pathological Technic* (3)—Three laboratories. Junior year. Bact. 1 desirable.

Examination of fresh material; fixation; decalcification; sectioning by free hand and freezing methods; celloidin and paraffin embedding and sectioning; general staining methods.

(Reed.)

BACT. 110 s. *Pathological Technic (Continued)* (2-5)—Laboratory course. Junior year. Prerequisite, Bact. 109 f or consent of instructor.

Special methods in pathological investigations and laboratory procedures which may be applied to clinical diagnosis.

(Reed.)

BACT. 125 f. *Clinical Methods* (3)—One lecture; two laboratories. Senior year. Prerequisite, Bact. 1 and consent of instructor.

Clinical material, diagnostic features. Methods in the qualitative and quantitative determination of important constituents of gastric contents, blood, urine, feces, and exudates. Offered alternate years, alternating with Bact. 111 f. (Not given in 1937-1938.)

(Bartram.)

#### For Graduates

BACT. 203 f or s. *Animal Disease Problems* (2-6). Prerequisite, degree in veterinary medicine from an approved veterinary college or consent of instructor. Laboratory and field work by assignment.

(Reed.)

BACT. 204 y. *Animal Disease Problems (Continued)* (2-6). Prerequisite, degree in veterinary medicine from an approved veterinary college or consent of instructor.

(Reed.)

#### BOTANY

PROFESSORS APPLEMAN, NORTON, TEMPLE;

ASSOCIATE PROFESSOR BAMFORD; ASSISTANT PROFESSORS BROWN,

DUBUY; DR. WOODS, MR. MCCANN, MR. TILLSON, MR. REYNARD,

MR. SHIRK, MR. BELLOWES, MR. OLSON.

##### A. General Botany and Morphology

BOT. 1 f. *General Botany* (4)—Two lectures; two laboratories.

General introduction to botany, touching briefly on all phases of the subject. The chief aim in this course is to present fundamental biological principles rather than to lay the foundation for professional botany. The student is also acquainted with the true nature and aim of botanical science, its methods, and the value of its results.

BOT. 2 s. *General Botany* (4)—Two lectures; two laboratories. Prerequisite, Bot. 1.

A study of algae, bacteria, fungi, liverworts, mosses, ferns, and seed plants. The development of reproduction, adjustment of plants to land, habit of growth, and the attendant changes in vascular and anatomical structures are stressed. Several field trips will be arranged. With Bot. 1, a cultural course intended also as foundational to a career in the plant sciences.



BOT. 3 s. *Introductory Botany* (3)—Two lectures; one demonstration or laboratory period.

A course similar to Bot. 1 f, except that only one demonstration or laboratory period is required.

BOT. 4 s. *Local Flora* (2)—Two laboratories.

A study of common plants, both wild and cultivated, and the use of keys, floral manuals, and other methods of identifying them. Largely field work.

#### For Advanced Undergraduates and Graduates

BOT. 101 f. *Plant Anatomy* (3)—One lecture; two laboratories. Prerequisite, Bot. 1.

The origin and development of the organs and tissue systems in the vascular plants, with special emphasis on the structures of roots, stems, and leaves. Reports of current literature are required. (Bamford.)

BOT. 102 f. *Mycology* (4)—Two lectures; two laboratories.

An introductory study of the morphology, life histories, classification, and economics of the fungi. Methods of cultivating fungi and identification of plant pathogens constitute a part of the laboratory work.

(Norton, Woods.)

BOT. 103 f. *Plant Taxonomy* (3)—One lecture; two laboratories.

Classification of the vegetable kingdom, and the principles underlying it; the use of other sciences and all phases of botany as taxonomic foundations; methods of taxonomic research in field, garden, herbarium, and library. Each student to work on a special problem during some of the laboratory time. (Not given in 1937-1938.) (Norton.)

BOT. 104 s. *Advanced Plant Taxonomy* (3)—One lecture; two laboratories.

Principles and criteria of plant taxonomy. Reviews and criticisms of current taxonomic literature. Each student works on an original problem during the laboratory time. (Norton.)

BOT. 105 s. *Economic Plants* (2)—Two lectures.

The names, taxonomic position, native and commercial geographic distribution, and use of the leading economic plants of the world are studied. By examination of plant products from markets, stores, factories, and gardens, students become familiar with the useful plants both in the natural form and as used by man. (Not given in 1937-1938.) (Norton.)

BOT. 106 f. *History and Philosophy of Botany* (1)—One lecture.

Discussion of the development of ideas and knowledge about plants, also a survey of contemporary work in botanical science. (Norton.)

BOT. 107 f. *Methods in Plant Histology* (2)—Two laboratories.

Principles and methods involved in the preparation of permanent slides. (Bamford.)

BOT. 201 s. *Cytology* (4)—Two lectures; two laboratories. Prerequisite, Bot. 1 f.

A detailed study of the cell during its metabolic and reproductive stages. The major portion is devoted to chromosomes in mitosis and meiosis, and the relation of these stages to current theories of heredity and evolution. The laboratory involves the preparation, examination, and illustration of cytological material by current methods. (Bamford.)

BOT. 203 f and s. *Seminar* (1).

The study of special topics in plant morphology, anatomy, and cytology. (Bamford.)

BOT. 204. *Research*—Credit according to work done. (Norton, Bamford.)

NOTE: See announcement on page 299 for further botany courses given at the Chesapeake Biological Laboratory.

#### B. Plant Pathology

PLT. PATH. 1 f. *Diseases of Plants* (4)—Two lectures; two laboratories. Prerequisite, Bot. 1 f.

An introductory study in the field, in the laboratory, and in the literature, of symptoms, causal agents, and control measures of the diseases of plants. The work is so arranged that a student may devote part of his time to the important diseases of the plants in which he is particularly interested.

#### For Advanced Undergraduates and Graduates

PLT. PATH. 101 s. *Diseases of Fruits* (2-4)—Two lectures; laboratory according to credit desired. Prerequisite, Plt. Path. 1 f.

An intensive study intended to give a rather thorough knowledge of the subject matter, such as is needed by those who expect to become advisers in fruit production, as well as those who expect to become specialists in plant pathology. (Woods.)

PLT. PATH. 102 s. *Diseases of Garden and Field Crops* (2-4)—Two lectures; laboratory according to credit desired. Prerequisite, Plt. Path. 1 f.

The diseases of garden crops, truck crops, cereal and forage crops. Intended for students of vegetable culture, agronomy, and plant pathology, and for those preparing for county agent work. (Temple.)

PLT. PATH. 103 s. *Research Methods* (2)—One conference and five hours of laboratory and library work. Prerequisite, Plt. Path. 1 f or equivalent.

Technic of plant disease investigations: sterilization, culture media, isolation of pathogens, inoculation methods, single-spore methods, disinfectants, fungicides; photography, preparation of manuscripts, and the literature in the scientific journals and bulletins on these subjects. (Woods.)



PLT. PATH. 104 f and s. *Minor Investigations* (1-3)—Credit according to work done. A laboratory course with conferences. Prerequisite, Plt. Path. 1 f.

In this course only minor problems or special phases of major investigations may be undertaken. Their solution may include a survey of the literature on the problem under investigation and both laboratory and field work. (Norton, Temple, Woods.)

PLT. PATH. 105 s. *Diseases of Ornamentals* (2)—One lecture; one laboratory.

The most important diseases of plants growing in greenhouse, flower garden, and landscape, including shrubs and shade trees. (Temple.)

PLT. PATH. 106 y. *Seminar* (1).

Conferences and reports on plant pathological literature and on recent investigations. (Temple, Norton.)

PLT. PATH. 107 f. *Plant Disease Control* (3)—Two lectures; one laboratory. Prerequisite, Plt. Path. 1 f.

An advanced course dealing with the theory and practice of plant disease control; the preparation of sprays and other fungicides and the testing of their toxicity in greenhouse and laboratory; demonstration and other extension methods adapted to county agent work and to the teaching of agriculture in high schools. (Temple.)

#### For Graduates

PLT. PATH. 201 f. *Virus Diseases* (2)—Two lectures.

An advanced course, including a study of the current literature on the subject and the working of a problem in the greenhouse. (Temple.)

PLT. PATH. 203 s. *Non-Parasitic Diseases* (3)—Two lectures; one laboratory.

Effects of maladjustment of plants to their environment; injuries due to climate, soil, gases; dusts and sprays; fertilizers; improper treatment and other detrimental conditions. (Not given in 1937-1938.) (Norton.)

PLT. PATH. 205 y. *Research*—Credit according to work done. (Norton, Temple.)

#### C. Plant Physiology

##### For Advanced Undergraduates and Graduates

PLT. PHYS. 101 f. *Plant Physiology* (4)—Two lectures; two laboratories. Prerequisite, Bot. 1 f.

A summary view of the general physiological activities of plants. The aim in this course is to stress principles rather than factual details. (Brown.)

PLT. PHYS. 102 s. *Plant Ecology* (3)—Two lectures; one laboratory. Prerequisite, Bot. 1 f.

The study of plants in relation to their environments. Plant formations and successions in various parts of the country are briefly treated. Much of the work, especially the practical, must be carried on in the field, and for this purpose type regions adjacent to the University are selected. (Brown.)

#### For Graduates

PLT. PHYS. 201 s. *Plant Biochemistry* (4)—Two lectures; two laboratories. Prerequisite, an elementary knowledge of plant physiology and organic chemistry.

An advanced course in plant physiology, in which the chemical aspects are especially emphasized. It deals with the important substances in the composition of the plant body and with the important processes in plant life. (Appleman, Shirk.)

PLT. PHYS. 202 Af. *Plant Biophysics* (2)—Two lectures. Prerequisites, Bot. 1 f and Plt. Phys. 101 f or equivalent. An elementary knowledge of physics or physical chemistry is highly desirable.

An advanced course dealing with the operation of physical forces in plant life processes. (Brown, ———.)

PLT. PHYS. 202 Bf. *Biophysical Methods* (2).

A laboratory course to accompany Plt. Phys. 202 Af. (Appleman, Shirk.)

PLT. PHYS. 203 s. *Plant Microchemistry* (2)—One lecture; one laboratory. Prerequisites, Bot. 1 f, Chem. 1 y, or equivalents.

The isolation, identification, and localization of organic and inorganic substances found in plant tissues by micro-technical methods. The use of these methods in the study of metabolism in plants is emphasized. (Brown.)

PLT. PHYS. 204 f. *Growth and Development* (2). (Not given in 1937-1938.) (Appleman.)

PLT. PHYS. 205 f and s. *Seminar* (1).

Students are required to prepare reports on papers in the current literature. These are discussed in connection with the recent advances in the subject. (Appleman.)

PLT. PHYS. 206 y. *Research*—Credit according to work done.

Students must be specially qualified by previous work to pursue with profit the research to be undertaken. (Appleman, Brown, duBuy.)



## CHEMISTRY

PROFESSORS BROUGHTON, DRAKE, HARING, McDONNELL;

ASSOCIATE PROFESSORS WHITE, WILEY;

ASSISTANT PROFESSOR MACHWART;

DR. SUPPLEE, DR. WEILAND, DR. WHITE, MR. BROOKS, MR. CARHART,

MR. HELLER, MR. HORNE, MR. HOWARD, MR. INGERSOLL, MR. KRAYBILL

MR. LOWE, MR. SMITH, MR. SPANGLER, MR. STANTON,

MR. STIMPSON, MR. WOLFE, MR. ZAPPONI.

### A. General Chemistry

CHEM. 1 A y. *General Chemistry* (8)—Two lectures; two laboratories.

A study of the non-metals and metals. One of the main purposes of the course is to develop original work, clear thinking, and keen observation.

Course A is intended for students who have never studied chemistry, or have passed their high school chemistry with a grade lower than B.

CHEM. 1 B y. *General Chemistry* (8)—Two lectures; two laboratories.

This course covers the same ground as Chem. 1 A y; but the subject matter is taken up in more detail, with emphasis on chemical theory and important generalization. The laboratory work deals with fundamental principles, the preparation and purification of compounds, and a systematic qualitative analysis of the more common metals and acid radicals.

Course B is intended for students who have passed an approved high school chemistry course with a grade not lower than B.

CHEM. 2 y. *Qualitative Analysis* (6)—Two lectures; one laboratory the first semester; and one lecture; two laboratories the second semester. Prerequisite, Chem. 1 y.

A study of the reactions of the common metals and the acid radicals, their separation and identification, and the general underlying principles.

CHEM. 3 y. *Introductory Chemistry* (6)—Two lectures; one demonstration.

The subject matter is essentially the same as that of Chem. 1 A y. This course is designed for students desiring a working knowledge of elementary chemistry, without the laboratory part. It is not accepted as a prerequisite for advanced chemistry courses. If one subsequently desires credit for Chem. 1 y, he may secure this by adding two credits in the laboratory of Chem. 1 y s. A demonstration fee of five dollars is required.

### For Advanced Undergraduates and Graduates

CHEM. 104 f. *Advanced Inorganic Chemistry* (4)—Two lectures; two laboratories. Prerequisite, Chem. 2 y. Lectures may be taken without laboratory.

This course is an advanced study of the general principles of inorganic chemistry. Special emphasis is given to the reactions and the more unusual

properties of the common elements. Laboratory experiments are selected which involve important theoretical considerations. (White.)

### For Graduates

CHEM. 200 A y. *Chemistry of the Rarer Elements* (4)—Two lectures. Prerequisite, Chem. 2 y.

The course is devoted to a study of the elements not usually considered in the elementary course. (White.)

CHEM. 200 B y. *Advanced Inorganic Laboratory* (4)—Two laboratories. Prerequisite, consent of instructor.

A laboratory study of the analyses and the compounds of elements considered in Chem. 200 A y. (White.)

CHEM. 201 f or s. *An Introduction to Spectographic Analysis* (11).

This is a laboratory course designed to give the student the fundamental principles of spectographic analysis. (White.)

### B. Analytical Chemistry

CHEM. 4 f or s. *Quantitative Analysis* (4)—Two lectures; two laboratories. Prerequisite, Chem. 1 y.

Quantitative analysis for premedical students, with special reference to volumetric methods.

CHEM. 6 y. *Quantitative Analysis* (8)—Two lectures; two laboratories. Prerequisite, Chem. 2 y.

The principal operations of gravimetric analysis. Standardization of weights and apparatus used in chemical analysis. The principal operations of volumetric analysis. Study of indicators, typical volumetric and colorimetric methods. The calculations of volumetric and gravimetric analysis are emphasized, as well as calculations relating to common ion effect. Required of all students whose major is chemistry.

### For Advanced Undergraduates and Graduates

CHEM. 101 y. *Advanced Quantitative Analysis* (10)—Two lectures; three laboratories. Prerequisite, Chem. 6 y or its equivalent.

A broad survey of the field of inorganic quantitative analysis. In the first semester mineral analysis is given. Included in this is analysis of silicates, carbonates, etc. In the second semester the analysis of steel and iron is taken up. However, the student is given wide latitude as to the type of quantitative analysis he pursues during the second semester. (Wiley.)

### C. Organic Chemistry

CHEM. 8 A y. *Elementary Organic Chemistry* (4)—Two lectures. Prerequisite, Chem. 1 y.

This course includes an elementary study of the fundamentals of organic chemistry, and is designed to meet the needs of students specializing in chemistry, and premedical students.



CHEM. 8 B y. *Elementary Organic Laboratory* (2)—One laboratory.

A course designed to familiarize the student with the fundamental methods of the organic laboratory. This course, with Chem. 8 A y, satisfies the premedical requirements in organic chemistry.

#### For Advanced Undergraduates and Graduates

CHEM. 116 y. *Advanced Organic Chemistry* (4)—Two lectures. Prerequisite, Chem. 8 A y and 8 B y or their equivalent.

This course is devoted to a more advanced study of the compounds of carbon than is undertaken in Chem. 8 A y. Graduate students who desire an accompanying laboratory course should elect Chem. 210 y. Juniors taking Chem. 116 y are expected to accompany it with Chem. 117 y, and to elect Chem. 118 y in their senior year. (Drake.)

CHEM. 117 y. *Organic Laboratory* (2)—One laboratory.

This course is devoted to an elementary study of organic qualitative analysis. The work includes the identification of unknown organic compounds, and corresponds to the more extended course, Chem. 207. (Drake.)

CHEM. 118 y. *Advanced Organic Laboratory* (2)—One laboratory.

A study of organic quantitative analysis and the preparation of organic compounds. Quantitative determinations of carbon and hydrogen, nitrogen, and halogen are carried out, and syntheses more difficult than those of Chem. 8 B y are studied. (Drake.)

#### For Graduates

CHEM. 203 f or s. *Special Topics in Organic Chemistry* (2-4-6)—A lecture course, which will be given any half-year when there is sufficient demand.

The course will be devoted to an advanced study of topics which are too specialized to be considered in Chem. 116 y. Topics that may be covered are dyes, drugs, carbohydrates, plant pigments, etc. The subject matter will be varied to suit best the needs of the particular group enrolled, and a student may register for the course for three semesters and acquire a total of six credits. (Drake.)

CHEM. 205 f or s. *Organic Preparations* (4)—A laboratory course, devoted to the synthesis of various organic compounds.

This course is designed to fit the needs of students whose laboratory experience has been insufficient for research in organic chemistry. (Drake.)

CHEM. 206 f or s. *Organic Microanalysis* (4)—A laboratory study of the methods of Pregl for the quantitative determination of halogen, nitrogen, carbon, hydrogen, methoxyl, etc., in very small quantities of material.

This course is open only to properly qualified students, and the consent of the instructor is necessary before enrollment. (Drake.)

CHEM. 207 f or s. *Organic Qualitative Analysis* (variable credit to suit student, with a minimum of 2 and a maximum of 6 credits.)

Laboratory work devoted to the identification of pure organic substances and of mixtures. The text used is Kamm's *Qualitative Organic Analysis*.

This course should be taken by students seeking a higher degree, whose major is organic chemistry. The work is an excellent preparation for the problems of identification one is likely to encounter while conducting research. (Drake.)

CHEM. 210 y. *Advanced Organic Laboratory* (4 or 6).

Students electing this course should elect Chem. 116 y. The content of the course is essentially that of Chem. 117 y and 118 y, but may be varied within wide limits to fit the needs of the individual student. (Drake.)

#### D. Physical Chemistry

##### For Advanced Undergraduates and Graduates

CHEM. 102 A y. *Physical Chemistry* (6)—Three lectures. Prerequisites, Chem. 6 y; Phys. 2 y; Math. 16 y.

For those taking laboratory, graduate students will elect Chem. 219 f and s (4), and undergraduates Chem. 102 B y (4).

This course aims to furnish the student with a thorough background in the laws of theories of chemistry. The gas laws, kinetic theory, liquids, solutions, elementary thermodynamics, thermochemistry, equilibrium, chemical kinetics, etc., will be discussed. (Haring.)

CHEM. 102 B y. *Physical Chemistry Laboratory* (4)—Two laboratories.

This course must be taken by undergraduates who desire to take laboratory work in connection with Chem. 102 A y. (Haring.)

CHEM. 103 y. *Elements of Physical Chemistry* (6)—Two lectures; one laboratory. Prerequisites, Chem. 1 y; Phys. 1 y; Math. 8 f and 10 s or 11 f and 14 s. (Haring.)

This course is designed to meet the needs of premedical students and others unable to pursue the subject further. Subjects discussed are gases and liquids, solutions, electrolytic conductance, colloidal solutions, thermochemistry, equilibria including indicators and buffers, reaction rates, electrochemistry including pH, etc. Quantitative experiments on these subjects are performed in the laboratory.

##### For Graduates

Note: CHEM. 102 A y and 102 B y or their equivalent are prerequisites for all advanced courses in physical chemistry.

CHEM. 212 A f and s. *Colloid Chemistry* (4)—Two lectures.

This is a thorough course in the chemistry of matter associated with surface energy. First semester, theory; second semester, practical applications. (Haring.)



CHEM. 212 B f and s. *Colloid Chemistry Laboratory* (4)—Two laboratories, which must accompany or be preceded by Chem. 212 A f and s.

(Haring.)

CHEM. 213 f. *Phase Rule* (2)—Two lectures.

A systematic study of heterogeneous equilibria. One, two, and three component systems will be considered, with practical applications of each. (Not given in 1937-1938.)

(Haring.)

CHEM. 214 s. *Structure of Matter* (2)—Two lectures.

Subjects considered are radioactivity, isotopes; the Bohr and Lewis-Langmuir theories of atomic structure, and allied topics.

(Haring.)

CHEM. 215 s. *Catalysis* (2)—Two lectures.

This course consists of lectures on the theory and applications of catalysis. (Not given in 1937-1938.)

(Haring.)

CHEM. 217 A f and s. *Electrochemistry* (4)—Two lectures.

A study of the principles and some of the practical applications of electrochemistry. First semester, theory; second semester, practical applications. (Not given in 1937-1938.)

(Haring.)

CHEM. 217 B f and s. *Electrochemistry Laboratory* (4)—Two laboratories, which must accompany or be preceded by Chem. 217 A f and s. (Not given in 1937-1938.)

(Haring.)

CHEM. 218 y. *Chemical Thermodynamics* (4)—Two lectures.

A study of the methods of approaching chemical problems through the laws of energy.

(Haring.)

CHEM. 219 f and s. *Physical Chemistry Laboratory* (4 or 6)—Two laboratories and one conference.

Students taking this course may elect 6 credits of lectures in Chem. 102 A y to replace the conference.

(Haring.)

#### E. Biological Chemistry

CHEM. 12 A y. *Elements of Organic Chemistry* (4)—Two lectures.

The chemistry of carbon and its compounds in relation to biology. This course is particularly designed for students in Agriculture and Home Economics.

CHEM. 12 B y. *Elementary Organic Laboratory* (2)—One laboratory.

A course designed to familiarize the student with the fundamental methods of the organic laboratory. The course is designed to accompany Chem. 12 A y.

CHEM. 14 s. *Chemistry of Textiles* (3)—Two lectures; one laboratory. Prerequisite, Chem. 12 A y and Chem. 12 B f or s.

A study of the principal textile fibres, their chemical and mechanical structure. Chemical methods are given for identifying the various fibres and for a study of dyes and mordants.

#### For Advanced Undergraduates and Graduates

CHEM. 106 f or s. *Dairy Chemistry* (4)—One lecture; three laboratories. Prerequisite, Chem. 12 A y and Chem. 12 B y.

Lectures and assigned reading on the constituents of dairy products. This course is designed to give the student a working knowledge and laboratory practice in dairy chemistry and analysis. Practice is given in examining dairy products for confirmation under the food laws, detection of watering, detection of preservatives and added colors, and the detection of adulterants. Students showing sufficient progress may take the second semester's work, and elect to isolate and make complete analysis of the fat or protein of milk.

(McDonnell.)

CHEM. 108 s. *General Physiological Chemistry* (4)—Two lectures; two laboratories. Prerequisite, Chem. 12 A y and Chem. 12 B y or their equivalent.

This course is a study of the fundamental principles of human nutrition, the chemistry of foods, digestion, absorption, assimilation, tissue composition, and excretion. The laboratory work consists of experiments in food analysis; salivary, gastric, pancreatic and intestinal digestion; and respiration.

(Broughton.)

CHEM. 115 f or s. *Organic Analysis* (4)—One lecture; three laboratories. Prerequisite, Chem. 4 f or s or Chem. 12 A y and Chem. 12 B y.

This course gives a connected introductory training in organic analysis, especially as applied to plant and animal substances and their manufactured products. The greater part of the course is devoted to quantitative methods for food materials and related substances. Standard works and the publications of the Association of Official Agricultural Chemists are used freely as references.

(Broughton.)

#### For Graduates

CHEM. 208 s. *Biological Analysis* (2)—Two laboratories.

A course in analytical methods of special value to students whose major field is the biological sciences. The work is varied to suit the needs or interests of the individual when possible.

(Broughton and Supplee.)

CHEM. 221 f or s. *Tissue Analysis* (3)—Three laboratories. Prerequisite, Chem. 12 A y and 12 B y or their equivalent.

A discussion and the application of the analytical methods used in determining the inorganic and organic constituents of plant and animal tissue.

(Broughton.)

CHEM. 223 A f and s. *Physiological Chemistry* (4)—Two lectures. Prerequisite, Chem. 12 A y and Chem. 12 B y or their equivalent.

An advanced course in physiological chemistry. For the first semester the course consists of lectures and assigned reading on the constitution and reactions of proteins, fats, carbohydrates, and allied compounds of biological importance. The second semester deals with enzyme action, digestion, absorption, metabolism, and excretion.

(Broughton.)



CHEM. 223 B f. *Physiological Chemistry Laboratory* (2). Prerequisites, Chem. 4 f or s and Chem. 12 A y and 12 B y.

A laboratory course to accompany Chem. 223 A f. Qualitative and quantitative analysis of foods; salivary, gastric, pancreatic, and intestinal digestion; and respiration. (Broughton and Supplee.)

CHEM. 224 f or s. *Special Problems* (4-8)—A total of eight credit hours may be obtained in this course by continuing the course for two semesters. Laboratory, library, and conference work amounting to a minimum of ten hours each week. Prerequisites, Chem. 223 A f and s, and consent of instructor.

This course consists of studies of special methods, such as the separation of the fatty acids from a selected fat, the preparation of carbohydrates or amino acids, and the determination of the distribution of nitrogen in a protein. The students will choose, with the advice of the instructor, the particular problem to be studied. (Broughton.)

CHEM. 226 f or s. *Toxicology* (3)—One lecture; two laboratories.

Theory and practice of the detection and estimation of toxic substances. The laboratory work includes alkaloids, toxic gases, and inorganic poisons. (McDonnell.)

#### F. Industrial Chemistry

##### For Advanced Undergraduates and Graduates

CHEM. 110 y. *Industrial Chemistry* (6)—Three lectures. Prerequisites, Chem. 6 y and 8 y.

A study of the principal chemical industries; plant inspection, trips, and reports; the preparation of a report on some chemical industry. (Machwart.)

CHEM. 111 s. *Engineering Chemistry* (2 or 3)—Two lectures; one laboratory. This course may be taken with or without laboratory.

A study of the chemistry of engineering materials. (Machwart.)

CHEM. 113 y. *Advanced Industrial Chemistry* (6)—One lecture; two laboratories. Prerequisite, Chem. 110 y.

Unit operations typical of industrial practice; fluid flow, heat transfer, distillation, etc. Examination of materials. Plant design. Application of unit operations to a complete chemical process. (Machwart.)

CHEM. 120 f. *Elements of Chemical Engineering* (3)—Two lectures; one laboratory.

A theoretical discussion of heat transfer, pyrometry, liquid flow, humidity, air-conditioning, refrigeration, etc. (Machwart.)

##### For Graduates

CHEM. 222 y. *Unit Operations* (6)—Three lectures. Prerequisite, consent of instructor.

A theoretical discussion of evaporation, distillation, filtration, etc. Problems. (Machwart.)

CHEM. 225 s. *Gas Analysis* (3)—One lecture; two laboratories. Prerequisite, consent of instructor.

Quantitative determination of common gases. Flue gas and water gas analysis, including calorific determinations of the latter. Problems. (Machwart.)

#### G. History of Chemistry

CHEM. 121 y. *The History of Chemistry* (2)—One lecture. Prerequisite, Chem. 1 y and Chem. 8 y or their equivalent. Required of senior students in the Department of Chemistry.

The development of chemical knowledge, and especially of the general doctrines of chemistry which have been gradually evolved, from their earliest beginnings up to the present day. (Not given in 1937-1938.) (Broughton.)

#### H. Seminar and Research

CHEM. 228 f and s. *Seminar* (2)—Required of all graduate students in chemistry.

Students are required to prepare reports on papers in the current literature. These are discussed in connection with the recent advances in the subject. (Staff.)

CHEM. 229 f or s. *Research in Chemistry*. The investigation of special problems and the preparation of a thesis towards an advanced degree. (Staff.)

#### COMPARATIVE LITERATURE

##### For Advanced Undergraduates and Graduates

The work in Comparative Literature is offered jointly by the faculties of the Department of English and the Department of Modern Languages.

A minor only may be taken in Comparative Literature. English 113 f and 114 s may be counted as Comparative Literature by students who have had Comp. Lit. 105 f and 106 s. English 124 s may also be counted as Comparative Literature.

COMP. LIT. 101 f. *Introduction to Comparative Literature* (3)—Three lectures.

Survey of the background of European literature through study in English translations of Greek and Latin literature. Emphasis is laid on the development of the epic, tragedy, comedy, and other typical forms of literary expression. The debt of modern literature to the ancients is discussed and illustrated. (Prah.)

COMP. LIT. 102 s. *Introduction to Comparative Literature* (3)—Three lectures.

Continuation of Comp. Lit. 101 f; study of medieval and modern Continental literature. (Prah.)



COMP. LIT. 103 f. *Types of English Literature* (2)—Two lectures.

An historical and critical survey of the principal types of English literature, with special attention to the influence of classical myth and legend and of classical literary ideals upon English and American writers. (Harman.)

COMP. LIT. 104 s. *The Old Testament as Literature* (2)—Two lectures. For seniors and graduate students. A study of the sources, development, and literary types. (Hale.)

COMP. LIT. 105 f. *Romanticism in France* (3)—Three lectures. Introduction to the chief authors of the Romantic movement in France. Lectures on the thought currents and literary movements of the late eighteenth and early nineteenth centuries. The reading in this course is done in English translations. (Wilcox.)

COMP. LIT. 106 s. *Romanticism in Germany* (3)—Three lectures. Continuation of Comp. Lit. 105 f. German literature from Buerger to Heine. The reading is done in English translations. (Prah.)

COMP. LIT. 107 f. *The Faust Legend in English and German Literature* (2)—Two lectures. A study of the Faust Legend of the Middle Ages and its later treatment by Marlowe in *Dr. Faustus* and by Goethe in *Faust*. (Not given in 1937-1938.) (Prah.)

#### DAIRY HUSBANDRY

PROFESSORS IKELER, MEADE, INGHAM; ASSOCIATE PROFESSORS BERRY, ENGLAND; MR. MECHAM, MR. HUGHES.

D. H. 1 f or s. *Introductory Dairy Science* (3)—Two lectures; one laboratory. Sophomore year. Prerequisite, Chem. 1 y.

A general survey of the dairy industry, its history and development, the composition of milk and its physical and chemical properties, the production and distribution of dairy products, and the principles involved in dairy manufacturing processes. The Babcock Test, other quantitative tests for fat and other constituents, simple qualitative tests for adulterants and preservatives, and visits to the University milk plant and manufacturing laboratories. (England.)

D. H. 2 f. *Dairy Breeds and Judging* (2)—One lecture, one laboratory. An introduction to the origin, development, characteristics, and qualities of dairy breeds of cattle, with attention to elementary judging practice. Students in this course will be required to fit and show an animal in the annual Students' Fitting and Showing Contest. (Ingham.)

D. H. 3 f. *Milk Testing and Scoring* (1)—One laboratory. The principles of, and practice in testing milk and cream by the Babcock method. Practice in judging and scoring market milk. Open only to students whose major is Agricultural Education. (England.)

#### For Advanced Undergraduates and Graduates Dairy Production

D. H. 100 f. *Geography of Dairying* (2)—Two lectures.

A study of the development of the dairy industry in our agricultural system and its adaptability to the various sections and conditions of the nations. (Berry, Ikeler.)

D. H. 101 y. *Dairy Production* (6)—Two lectures; one laboratory.

A study of the care, feeding, breeding, and management of the dairy herd; dairy farm buildings and equipment; testing and herd improvement; bull associations; sanitation and the production and marketing of high quality milk; fitting, showing, and judging of dairy cattle. Students in this course will be required to fit and show an animal in the annual Students' Fitting and Showing Contest. (Ingham.)

D. H. 102 s. *Dairy Cattle Judging—Juniors-Seniors* (1)—One laboratory.

Comparative judging of dairy cattle. Trips to various farms. Such dairy cattle judging teams as may be chosen to represent the University will be selected from among those taking this course. (Ingham.)

D. H. 103 f. *Advanced Dairy Cattle Judging* (1)—One laboratory. Senior year. Prerequisite, D. H. 102 s.

Advanced work in judging dairy cattle. Credit only to students who do satisfactory work in competition for the dairy cattle judging team. (Ingham.)

D. H. 104 s. *Advanced Study of Dairy Breeds* (2)—One lecture; one laboratory.

A study of the historical background, characteristics, noted individuals and families, and the more important blood lines in the Holstein, Guernsey, Ayrshire, and Jersey breeds. (Ingham.)

#### Dairy Manufacturing

D. H. 105 f. *Dairy Manufacturing* (5) — Two lectures; two 4 hour laboratories. Junior year. Prerequisite, D. H. 1 and Bact. 1.

The principles and practice of making casein, cheese, and butter, including a study of the physical, chemical, and biological factors involved. Laboratory practice will include visits to commercial factories. (England.)

D. H. 106 s. *Dairy Manufacturing* (5)—Two lectures; two 4 hour laboratories. Junior year. Prerequisite, D. H. 1 and Bact. 1.

The principles and practice of making condensed milk and milk powders; and ice cream, including a study of the physical, chemical, and biological factors involved. Laboratory practice will include visits to commercial factories. (England.)



D. H. 107 f. *Market Milk* (5)—Three lectures; two laboratories. Senior year. Prerequisite, D. H. 1 and Bact. 1.

Commercial and economic phases of market milk, with special reference to its transportation; processing, and distribution; certified milk; commercial buttermilk; milk laws; duties of milk inspectors; distribution; milk plant construction and operation. Laboratory practice includes visits to local dairies. (Not given in 1937-1938.) (England.)

D. H. 108 s. *Analysis of Dairy Products* (3)—One lecture; one 4 hour laboratory (consecutive). Senior year. Prerequisite, D. H. 1, Bact. 1, Chem. 4, Chem. 12 y.

The application of chemical and bacteriological methods to commercial dairy practice; analysis by standard chemical, bacteriological, and factory methods; standardization and composition control; tests for adulterants and preservatives. (Not given in 1937-1938.) (England.)

D. H. 109 s. *Grading Dairy Products* (1)—One laboratory. Junior year. Prerequisite, D. H. 1.

Market grades and the judging of milk, butter, cheese, and ice cream in the commercial field. (England, Mechem.)

D. H. 110 f. *Advanced Grading of Dairy Products* (1)—One laboratory. Senior year. Prerequisite, D. H. 109 s.

Advanced work on the judging of milk, butter, cheese, and ice cream. Open only to students who comprise the dairy products judging team. (England, Mechem.)

D. H. 111 y. *Dairy Mechanics* (2)—One laboratory. Junior year. Prerequisite, D. H. 1.

The theory and operation of the compression system of mechanical refrigeration. Construction, design, and care of dairy equipment, repairing, soldering, pipe fitting, and wiring. (Hughes.)

D. H. 112 s. *Dairy Accounting* (1)—One laboratory. Senior year. Prerequisite, D. H. 1.

Methods of accounting in the market milk plant and dairy manufacturing plants. (Hughes.)

D. H. 113 f or s. *Dairy Literature* (1)—One lecture. Junior or senior year. Prerequisite, D. H. 1.

Presentation and discussion of current literature in dairying. (England.)

D. H. 114 f. *Dairy Plant Experience* (3)—Senior year. Prerequisite, 10 hours of Dairy Husbandry.

Twelve weeks practical experience or its equivalent (following completion of junior year) in an approved market milk plant or factory manufacturing dairy products. A written report of the work is required. (England.)

D. H. 115 s. *Dairy Plant Experience* (1)—Senior year. Prerequisite, D. H. 1.

Two hundred hours practical experience in the University of Maryland Dairy Manufacturing Plant. The grade will be based on the dependability and efficiency of the student in performing work assigned.

(England, Hughes.)

### For Graduates

D. H. 201 f. *Advanced Dairy Production* (3).

A study of the newer discoveries in animal nutrition, breeding, and management. Readings and assignments. (Ingham.)

D. H. 202 f. *Dairy Technology* (2)—Two lectures.

A consideration of milk and dairy products from the physio-chemical point of view. (England.)

D. H. 203 s. *Milk Products* (2)—Two lectures.

An advanced consideration of the scientific and technical aspects of milk products. (England.)

D. H. 204 f or s. *Special Problems in Dairying* (1-3).

Special problems which relate specifically to the work the student is pursuing will be assigned. Credit will be given in accordance with the amount and character of work done. (Staff.)

D. H. 205 f or s. *Seminar* (1).

Students are required to prepare papers based upon research in progress or completed for presentation before and discussion by the class. (Staff.)

D. H. 206 y. *Research*—Credit to be determined by the amount and quality of work done.

The student will be required to pursue, with the approval of the head of the department, an original investigation in some phase of dairy husbandry, carry the same to completion, and report results in the form of a thesis.

(Meade, Ingham, England.)

### ECONOMICS AND BUSINESS ADMINISTRATION

PROFESSOR WEDEBERG; ASSOCIATE PROFESSOR NICHOL; ASSISTANT PROFESSORS DANIELS, LAYTON; MR. CISSEL, MR. REID, DR. NORRIS.

ECON. 1 f. *Economic Geography and Industry* (3)—Three lectures.

A study of the economic and political factors which are responsible for the location of industries, and which influence the production, distribution, and exchange of commodities throughout the world.

ECON. 2 s. *History of World Commerce* (3)—Three lectures.

Commercial development throughout the three major periods of history; viz., Ancient, Medieval, and Modern. Special emphasis is laid upon important changes brought about by the World War.



ECON. 3 y. *Principles of Economics* (6)—Three lectures. Prerequisite, sophomore standing.

A study of the general principles of economics: production, exchange, distribution, and consumption of wealth. The study is based upon a recent text, lectures, and student exercises.

ECON. 5 f or s. *Fundamentals of Economics* (3)—Three lectures. Elective. Not open to students having credit in Econ. 3 y. This course cannot be substituted for the first semester of Econ 3 y.

A study of the general principles underlying economic activity.

\* ECON. 7 f. *Business Organization and Operation* (2)—Two lectures.

A study of the growth of large business organizations. Types of organizations are studied from the viewpoints of legal status, relative efficiency, and social effects.

A. AND F. 9 y. *Principles of Accounting* (8) — Three lectures; one laboratory.

This course has two aims; namely, to give the prospective business man an idea of accounting as a means of control, and to serve as a basic course for advanced and specialized accounting. A study is made of methods and procedure of accounting in the sole proprietorship, partnership, and corporation.

#### For Advanced Undergraduates and Graduates

\* ECON. 101 f. *Money and Credit* (2) — Two lectures. Prerequisite, Econ. 3 y, or consent of the instructor.

A study of the origin, nature, and functions of money, monetary systems, credit and credit instruments, prices, interest rates, and exchanges. (Nichol.)

\* ECON. 102 s. *Banking* (2)—Two lectures. Prerequisite, Econ. 101 f. Principles and practices of banking in relation to business. Special emphasis upon the Federal Reserve System. (Nichol.)

\* ECON. 103 f. *Corporation Finance* (2)—Two lectures. Prerequisite, Econ. 3 y and A. and F. 9 y.

Principles of financing, the corporation and its status before the law, basis of capitalization, sources of capital funds, sinking funds, distribution of surplus, causes of failures, reorganizations, and receiverships. (Wedeborg.)

\* A. AND F. 104 s. *Investments* (3) — Three lectures. Prerequisite, Econ. 3 y, A. and F. 9 y, and senior standing.

Principles of investment, analyzing reports, price determination, taxation of securities, corporation bonds, civil obligations, real estate securities, and miscellaneous investments. Lectures, library assignments, and chart studies. (Layton.)

\*These courses may be used for a major or minor in the fields of Economics or Accounting and Finance.

\* ECON. 105 f. *Insurance* (2)—Two lectures. Prerequisite, Econ. 3 y.

A survey of the major principles and practices of life and property insurance, with special reference to their relationship to our social and economic life. (Daniels.)

A. AND F. 106 s. *Personnel Management* (2)—Two lectures. (See Psychology 106 s.)

A. AND F. 107 y. *Business Law* (6) — Three lectures. Prerequisite, junior standing.

Legal aspects of business relationships, contracts, negotiable instruments, agency, partnerships, corporations, real and personal property, and sales. (Layton.)

ECON. 109 f. *Labor Problems* (2)—Two lectures. Prerequisite, Econ. 3 y or Soc. 1 f.

The background of labor problems; labor organizations; labor legislation; unemployment and its remedies; wages, working conditions, and standards of living; agencies and programs for the promotion of industrial peace. (———.)

A. AND F. 110 y. *Advanced Accounting* (6) — Three lectures. Prerequisite, A. and F. 9 y.

Includes special phases of corporation accounting. (Wedeborg.)

ECON. 112 s. *Inland Transportation* (3)—Three lectures. Prerequisite, Econ. 3 y or Econ. 5 f or s.

The development of inland means of transportation in the United States. This course is devoted largely to a survey of railway transportation. Some study is given to other transportation agencies. (Daniels.)

ECON. 113 f. *Public Utilities* (2)—Two lectures. Prerequisite, Econ. 3 y.

The development of public utilities in the United States, economic and legal characteristics, regulatory agencies, valuation, rate of return, and public ownership. (Layton.)

\* ECON. 114 s. *Public Finance* (3)—Three lectures. Prerequisite, Econ. 3 y.

The nature of public expenditures, sources of revenue, taxation, and budgeting. Special emphasis on the practical, social, and economic problems involved. (Layton.)

\* ECON. 116 s. *Principles of Foreign Trade* (3)—Three lectures. Prerequisites, Econ. 3 y, Econ. 1 f, and Econ. 2 s, or their equivalent.

The basic principles of import and export trade, as influenced by the differences in methods of conducting domestic and foreign commerce. (Daniels.)

\*These courses may be used for a major or minor in the fields of Economics or Accounting and Finance.



ECON. 119 f. *Current Economic Problems* (2)—Two lectures. Prerequisite, Econ. 3 y and senior standing.

Current economic problems are studied from the viewpoint of the economist. Lectures and class discussions based on assigned readings. (Nichol.)

ECON. 120 s. *Advanced Economics* (2)—Two lectures. Prerequisite, Econ. 119 f or consent of instructor.

An analysis of the theories of contemporary economists. Special attention is given to the problems of value and distribution. (Nichol.)

A. AND F. 121 f. *Cost Accounting* (2) — Two lectures. Prerequisite, Econ. 109 y, and consent of instructor.

Job order cost, process cost, estimated order cost, and preparation of analytical statements. (Cissel.)

A. AND F. 122 s. *Cost Accounting* (2)—Two lectures. Prerequisite, A. and F. 121 f.

Standard cost; theory and problems. (Wedeborg.)

A. AND F. 123 f. *Income Tax Accounting* (3)—Three lectures. Prerequisite, A. and F. 110 y, or consent of instructor.

Selected cases illustrating the definition of taxable income of individuals, corporations, and partnerships. (Wedeborg.)

A. AND F. 125 f. *Auditing* (2)—Two lectures. Prerequisite, A. and F. 9 y and consent of instructor.

Principles of auditing, including a study of different kinds of audits, the preparation of reports, and illustrative cases or problems. (Cissel.)

A. AND F. 126 s. *Auditing* (2)—Two lectures. Prerequisite, A. and F. 125 f.

Practical auditing. (Wedeborg.)

\*A. AND F. 140 s. *Marketing of Manufactured Products* (3)—Three lectures. Prerequisite, Econ. 3 y.

A study of the fundamental principles of assembling and dispersing manufactured goods; functions of wholesale and retail middlemen; branch house distribution; mail order and chain store distribution; price and price policies; cash and quality discounts; price maintenance; and a discussion of the problem of distribution costs. (Reid.)

#### For Graduates

ECON. 201 y. *Research* (4-6). Credit proportioned to work accomplished. (Staff.)

ECON. 203 f and s. *Seminar* (4)—Prerequisite, consent of instructor.

Discussion of major problems in the field of economic theory, accounting, or business. Presentation of reports based upon original investigations. Designed for students in the department of Economics and Business Administration. (Staff.)

\*These courses may be used for a major or minor in the fields of Economics or Accounting and Finance.

ECON. 205 y. *History of Economic Thought* (4).

Development from classical antiquity with discussions of the different schools of economics. Extensive readings, with student reports. (Nichol, Norris.)

ECON. 207 y. *The Economics of Alfred Marshall* (6)—Three lectures. Study of the life work of the greatest English economist of the past generation. (Nichol.)

ECON. 209 y. *Mathematical Economics* (6)—Three lectures. Applications of geometry, algebra, and calculus to economic theory. (Not given in 1937-1938.) (Nichol.)

#### EDUCATION

PROFESSORS SMALL, COTTERMAN, SPROWLS, MACKERT, LONG;

ASSOCIATE PROFESSOR BRECHBILL; MISS SMITH,

MRS. BARTON, MISS CLOUGH.

##### A. History and Principles

ED. 2 f. *Introduction to Teaching-A* (2)—Required of sophomores in Education.

A finding course, with the purpose of assisting students to decide whether they have qualities requisite to success in teaching. Study of the physical qualifications, personality traits, personal habits, use of English, speech, and habits of work; and of the nature of the teacher's work.

ED. 3 s. *Introduction to Teaching-B* (2).

A continuation of Ed. 2 f.

ED. 5 s. *Technic of Teaching* (2). Required of juniors in Education. Prerequisite, Ed. Psych. 1 f.

Educational objectives and outcomes of teaching; types of lesson; problem, project, and unit; measuring results and marking; socialization and directed study; classroom management.

ED. 6 f. *Observation of Teaching* (1-2).

Observation and preliminary participation in the classes in which supervised teaching is to be done. Reports, conferences, and criticism.

##### For Advanced Undergraduates and Graduates

ED. 101 f. *History of Education* (2). Greco-Roman, Medieval, and Early Modern Education.

A survey of the evolution in Europe of educational theory, institutions, and practices from the Greco-Roman era to 1750. (Long.)

ED. 102 s. *History of Modern Education* (2). Continuation of Ed. 101 f.

The survey of the modern period is directed to the creators of modern education and the bases on which modern educational systems have been founded in various countries. (Long.)



ED. 103 s. *Principles of Secondary Education* (3). Prerequisite, Ed. Psych. 1 f and Ed. 5 s.

Evolution of the high school; European secondary education; articulation of the high school with the elementary school, college, and technical school, and with the community and the home; the junior high school; high school pupils; programs of study and the reconstruction of curricula; teaching staff; student activities. (Brechtbill.)

ED. 105 f. *Educational Sociology I* (3)—Three lectures.

A study of education as social control and emergent life, with emphasis upon the application of the recently developed concepts in modern school procedures. (Cotterman.)

ED. 107 f or s. *Comparative Education* (2).

The forces that cause different systems of education, and the characteristic differences in the educational policies and practices in various countries are studied in this course. The major emphasis is upon certain European systems. (Long.)

ED. 108 f or s. *Comparative Education* (2).

This course is similar to Ed. 107, an important difference being that education in Latin America receives major attention. (Long.)

ED. 110 f. *The Junior High School* (2).

This course considers the functions of the junior high school in the American public school system. Its development, present organization, curricula, and relation to upper and lower grades will be emphasized. (Long.)

ED. 111 f. *Lives of Scientists* (2).

A study of the major achievements and interesting incidents in the lives of the pioneers of science. Though designed especially to provide enrichment material for the use of high school teachers, the course is of general cultural value. (Brechtbill.)

#### For Graduates

ED. 200 f. *Organization and Administration of Public Education* (3).

This course deals objectively with the organization, administration, curricula, and present status of public education in the United States. (Small.)

ED. 201 s. *Educational Interpretations* (3).

In this course a study is made of the social, economic, political, and cultural environment in which American educational institutions and policies have developed; and of the function of education in environmental change. (Small.)

ED. 202 s. *College Teaching* (3). Three lectures.

Analysis of the work of the college teacher; objectives; organization of subject matter; nature of learning; characteristics of college students; methods of college teachers; measuring results; extra course duties; problems; investigations; reports. (Cotterman.)

ED. 204 s. *High School Administration and Supervision*. (3).

This course considers the principal's duties in relation to organization for operation, administration, and supervision of instruction, and community relationships. (Long.)

ED. 205 s. *Educational Sociology II* (3)—Three lectures.

This course deals with education as social adjustment through an analytical consideration of the objectives in the American program of education, methods of determining educational objectives, and a brief survey of the ways in which education has been used as social adjustment in foreign countries. (Cotterman.)

ED. 206 s. *History of American Education to 1850* (3).

The development of the public school in America up to 1850. (Long.)

ED. 250 y. *Seminar in Education* (2-4).

Required of all candidates for the Master's degree whose majors are in the field of education. (Staff.)

(For additional courses see Rural Life and Agricultural Education and Home Economics Education.)

#### B. Educational Psychology

ED. PSYCH. 1 f. *Educational Psychology* (3). Required of all juniors in Education. Open to others only by special permission.

The laws of learning and habit formation in their application to teaching in the high school; types of learning and their relation to types of subject matter; psychological principles involved in lesson assignments, tests, examinations; individual differences; incentives and discipline; mental hygiene in relation to personality problems and classroom instruction.

#### For Advanced Undergraduates and Graduates

ED. PSYCH. 101 s. *Advanced Educational Psychology* (3). Prerequisites, Ed. Psych. 1 f and Ed. 5 s. The latter may be taken concurrently with Ed. Psych. 101 s.

Principles of genetic psychology; nature and development of the human organism; development and control of instincts. Methods of testing intelligence; group and individual differences and their relation to educational practice. Methods of measuring rate of learning; study of typical learning experiments.

ED. PSYCH. 102 f. *Educational Measurements* (3). Prerequisites, Ed. Psych. 1 f and Ed. 5 s.

A study of typical educational problems involving educational scales and standard tests. Nature of tests, methods of use, analysis of results and practical applications in educational procedure. Emphasis is upon tests for high school subjects. (Brechtbill.)



ED. PSYCH. 105 s. *Mental Hygiene* (3). Prerequisite, Ed. Psych. 1 f or Psych. 1 f or s or equivalent.

Normal tendencies in the development of character and personality. Solving problems of adjustment to school and society; obsessions, fears, compulsions, conflicts, inhibitions, and compensations. Methods of personality analysis. (Sprowls.)

#### For Graduates

ED. PSYCH. 200 f. *Systematic Educational Psychology* (3).

An advanced course for teachers and prospective teachers. It deals with the major contributions of psychologists from Herbart to Watson to educational theory and practice. (Sprowls.)

ED. PSYCH. 250 y. *Seminar*.

#### C. Methods in High School Subjects

##### For Advanced Undergraduates and Graduates

Graduate credit for courses in this section will be given only by special permission of the College of Education.

ED. 120 s. *English in the High School* (2). Prerequisite, Ed. Psych. 1 f.

Objectives in English in the different types of high schools; selection and organization of subject matter in terms of modern practice and group needs; evaluation of texts and references; bibliographies; methods of procedure and types of lessons; the use of auxiliary materials; lesson plans; measuring results. (Smith.)

ED. 122 s. *The Social Studies in the High School* (2). Prerequisite, Ed. Psych. 1 f.

Selection and organization of subject matter in relation to the objectives and present trends in the social studies; texts and bibliographies; methods of procedure and types of lessons; the use of auxiliary materials; lesson plans; measuring results. (Clough.)

ED. 124 s. *Modern Language in the High School* (2). Prerequisite, Ed. Psych. 1 f.

Objectives of modern language teaching in the high school; selection and organization of subject matter in relation to modern practice and group needs; evaluation of texts and references; bibliographies. Methods of procedure and types of lessons; lesson plans; special devices; measuring results. (Barton.)

ED. 126 s. *Science in the High School* (2). Prerequisite, Ed. Psych. 1 f.

Objectives of science teaching, their relation to the general objectives of secondary education; application of the principles of psychology and of teaching to the science class room situation; selection and organization of

subject matter; history, trends, and status; textbooks, reference works, and laboratory equipment. Technic of class room and laboratory; measurement, standardized tests; professional organizations and literature; observation and criticism. (Brechbill.)

ED. 128 s. *Mathematics in the High School* (2). Prerequisite, Ed. Psych. 1 f.

Objectives; the place of mathematics in secondary education; content and construction of courses; recent trends; textbooks and equipment; methods of instruction; measurement and standardized tests; professional organizations and literature; observation and criticism. (Brechbill.)

ED. 130 f. *High School Course of Study—Composition* (2).

Content and organization of the materials of written and oral composition in the several high school grades. (Smith.)

ED. 131 s. *High School Course of Study—Literature* (2).

Content and organization of the literature course in the several high school grades. (Smith.)

ED. 135 f. *High School Course of Study—Geometry* (2).

Content and organization of intuitive and demonstrative geometry. Methods of analysis and problem solving. (Brechbill.)

ED. 136 f. *High School Course of Study—Biology* (2).

Content and organization of biology. (Brechbill.)

ED. 137 s. *High School Course of Study—Physical Science* (2).

Content and organization of physics. Some consideration is given to content of chemistry. (Brechbill.)

ED. 139 f or s. *Supervised Teaching of High School Subjects* (2).

Observation and supervised teaching. A minimum of 20 teaching periods.

E. English (Smith.)

S. S. Social Studies (Clough.)

L. Modern Language (Barton.)

Sc. Science (Brechbill.)

M. Mathematics (Brechbill.)

P. E. Physical Education (Mackert.)

C. Commercial Subjects

ED. 140 y. *Physical Education Activities for High School Girls* (4).

Required of juniors with Physical Education major or minor.

The principles and practices of activities appropriate for both class work and extra-curriculum programs in senior and junior high schools.



Ed. 141 f. *Physical Education in the High School (Boys)* (2). Prerequisites, Ed. Psych. 1 f, Ed. 5 s, Phys. Ed. 25 y.

Objectives of physical education for high school boys; lesson planning; problem cases; methods of handling classes, meets, pageants, and the like; physical and medical examinations; care of equipment; records; grading. (Mackert.)

Ed. 142 f. *Physical Education in the High School (Girls)* (2). Prerequisites, Ed. Psych. 1 f, Ed. 5 s, Ed. 140 y.

Objectives in physical education for girls in the different types of high schools; programs appropriate to high school girls; selection and organization of subject matter; lesson plans.

Ed. 150 f; Ed. 151 s. *Commercial Subjects in the High School* (2-6). Prerequisites, Ed. Psych. 1 f and Ed. 5 s.

Aims and methods for the teaching of shorthand, typewriting, and book-keeping in high schools.

## HOME ECONOMICS EDUCATION

PROFESSOR MCNAUGHTON.

H. E. Ed. 5 s. *Technic of Teaching* (2)—Required of juniors in Home Economics Education. Prerequisite, Ed. Psych. 1 f.

Philosophy of home economics education; survey of the needs of the community; analysis of the characteristics and interests of the high school girl; objectives for teaching home economics in high school; construction of units; use of problem, discussion, demonstration, and laboratory methods; selection of illustrative material; the home project. (McNaughton.)

H. E. Ed. 6 s. *Observation of Teaching* (1-2). Minimum of 20 class periods.

Classroom management; individual differences; types of lessons; observations and critiques; conferences. (McNaughton.)

### For Advanced Undergraduates and Graduates

H. E. Ed. 101 s. *Child Psychology* (3). Open to juniors.

Study of the nervous system; the glandular system; sensory development; habit formation; emotional controls. (McNaughton.)

H. E. Ed. 102 f. *Child Study* (4).

The study of child development in relation to the physical, mental, and educational phases of growth; study of textbooks and magazines; adaptation of material to teaching of child care in high school; observation and participation in University Nursery School. (McNaughton.)

H. E. Ed. 103 f or s. *Teaching Secondary Vocational Home Economics: Methods and Practice* (4). Prerequisite, H. E. Ed. 5 s.

Observation and teaching in a vocational department of a Maryland high school or in a junior high school in Washington. Organization of

units, lesson plans, field trips; planning and supervision of home projects. After completing the teaching unit the student observes in home economics departments other than one in which she has taught. (McNaughton.)

H. E. Ed. 105 f or s. *Special Problems in Child Study* (4)—Open to seniors. Prerequisite, H. E. Ed. 102 f.

Methods and practice in nursery school work in University Nursery School; making of particular studies related to the mental, emotional, or physical development of preschool children. (McNaughton.)

H. E. Ed. 106 s. *Problems in Teaching Home Economics* (1).

Analysis of the units in the State course of study; study of various methods for organization of class period; analysis of text-books; evaluation of illustrative material. (McNaughton.)

### For Graduates

H. E. Ed. 201 f or s. *Advanced Methods of Teaching Home Economics* (2-4).

Study of social trends as applied to the teaching of home economics. (McNaughton.)

H. E. Ed. 250 y. *Seminar in Home Economics Education* (2-4). (See Ed. 250 y.) (McNaughton.)

H. E. Ed. 251 y. *Research* (2-4)—Credit according to work done.

Students must be specially qualified by previous work to pursue with profit the research to be undertaken. (McNaughton.)

## RURAL LIFE AND AGRICULTURAL EDUCATION

PROFESSORS COTTERMAN, CARPENTER; MR. WORTHINGTON,  
MR. POFFENBERGER

### For Advanced Undergraduates and Graduates

R. Ed. 101 f. *Farm Practicums and Demonstrations* (1)—One laboratory. Cannot be used for graduate credit.

This course is designed to assist the student in relating the learning acquired in the several departments of the University with the problems of doing and demonstrating which he faces in the field and in the classroom as a teacher. It aims particularly to check his training in the essential practicums and demonstrations in vocational agriculture, and to introduce him to the conditions under which such activities must be carried on in the patronage areas and laboratories of vocational departments. Laboratory practice in deficiencies required. (Poffenberger.)

R. Ed. 102 s. *Farm Practicums and Demonstrations* (1)—One laboratory. Cannot be used for graduate credit.

Continuation of R. Ed. 101 f. (Poffenberger.)



R. ED. 104 s. *Rural Life and Education* (3)—Three lectures.

An intensive study of the educational agencies at work in rural communities, stressing an analysis of school patronage areas, the possibilities of normal life in rural areas, early beginnings in rural education, and the conditioning effects of economic differences. The course is designed especially for persons who expect to be called upon to assist in shaping educational and other community programs for rural people. (Cotterman.)

R. ED. 105 f. *Project Organization and Cost Accounting* (2)—Two lectures.

The development of project programs in terms of placement opportunities; project forecasting as a form of motivation; project estimating; systems of project cost accounting; practice in project accounting. (Worthington.)

R. ED. 107 f. *Observation and the Analysis of Teaching for Agricultural Students* (3)—Two lectures; one laboratory. Prerequisite, Ed. Psych. 1 f. Open to juniors and seniors; required of seniors in Rural Life and Agricultural Education.

This course deals with an analysis of pupil learning in class groups. (Cotterman.)

R. ED. 109 f. *Teaching Secondary Vocational Agriculture* (3)—Three lectures. Prerequisites, R. Ed. 105 f, 107 f; A. H. 1, 2; D. H. 1; Poultry 1; Soils 1; Agron. 1, 2; Hort. 1, 11; F. Mech. 101, 104; A. E. 2, 102; F. M. 2.

A comprehensive course in the work of high school departments of vocational agriculture. It emphasizes particularly placement, supervised farming programs, the organization and administration of Future Farmer work, and objectives and methods in all-day, continuation, and adult instruction. (Cotterman.)

R. ED. 112 s. *Departmental Organization and Administration* (2)—Two lectures. Prerequisites, R. Ed. 107 f, 105 f, 109 f.

The work of this course is based upon the construction and analysis of administrative programs for high school departments of vocational agriculture. As a project, each student prepares and analyzes in detail an administrative program for a specific school. Investigations and reports. (Worthington.)

R. ED. 114 s. *Teaching Farm Shop in Secondary Schools* (1)—One lecture.

Objectives in the teaching of farm shop; contemporary developments; determination of projects; shop management; shop programs; methods of teaching; equipment; materials of instruction; special projects. (Carpenter.)

R. ED. 120 f or s. *Practice Teaching* (2)—Prerequisites, R. Ed. 105 f, 107 f, 109 f.

Under the direction of a critic teacher the student in this course is required to analyze and prepare special units of subject matter, plan lessons,

and teach in coöperation with the critic teacher, exclusive of observation, not less than twenty periods of vocational agriculture.

(Cotterman, Worthington.)

ED. 105 f. *Educational Sociology I* (3)—See Education.

### For Graduates

R. ED. 201 f; 202 s. *Rural Life and Education* (3). Prerequisite, R. Ed. 104 s, or equivalent.

A sociological approach to rural education as a movement for a good life in rural communities. It embraces a study of the organization, administration, and supervision of the several agencies of public education as component parts of this movement and as forms of social economy and human development. Discussions, assigned readings, and major term papers in the field of the student's special interest. (Cotterman.)

R. ED. 207 f; 208 s. *Problems in Vocational Agriculture, Related Science, and Shop* (2-4).

In this course special emphasis is placed upon the current problems facing teachers of vocational agriculture. It is designed especially for persons who have had several years of teaching experience in this field. The three phases of the vocational teacher's program—all day, part-time, and adult work—receive attention. Discussions, surveys, investigations, and reports. (Cotterman.)

R. ED. 250 y. *Seminar in Rural Education* (2-4).

Problems in the organization, administration, and supervision of the several agencies of rural education. Investigations, papers, and reports. (Cotterman.)

R. ED. 251 y. *Research* (2-4). Credit hours according to work done. Students must be specially qualified by previous work to pursue with profit the research to be undertaken. (Cotterman.)

ED. 202 s. *College Teaching* (3). (See Education.)

ED. 205 s. *Educational Sociology II* (3). (See Education.)

## PHYSICAL EDUCATION

### A. Physical Education for Men

#### PROFESSOR MACKERT AND STUDENT ASSISTANTS

\*PHYS. ED. 1 y. *Physical Activities* (2).

An activities course for freshman boys, meeting three periods a week throughout the year. Activities included are soccer, touch football, basketball, volleyball, baseball (soft), track, and natural gymnastics.



**\*PHYS. ED. 3 y. *Physical Activities* (4).**

An activities course for sophomore boys, meeting three periods a week throughout the year. Activities included are soccer, touch football, basketball, volleyball, track, baseball (soft and hard), fencing, wrestling, boxing, ping pong, horseshoes, tennis, and natural gymnastics.

**PHYS. ED. 5 y. *Physical Education Practice* (2).**

An activities course required of junior men, meeting three periods a week throughout the year. Activities included are gymnastics, stunts, tumbling, apparatus, games, and calisthenics.

**PHYS. ED. 7 y. *Advanced Physical Education Practice* (2).**

An activities course required of senior men, meeting three periods a week throughout the year. Continuation of Phys. Ed. 5 y.

**PHYS. ED. 11 y. *Personal and Community Hygiene* (4).**

Freshman course required of men whose major is physical education and open to other freshmen and sophomores.

This course is designed to help the incoming student live at his best and to realize the finest ideals of his group.

**PHYS. ED. 13 y. *Coaching High School Athletics* (4).**

Junior course required of men whose major is physical education; elective for other junior and senior students.

Football, soccer, basketball, track, and baseball are analyzed from the point of view of successful team play on an interscholastic basis. The management of athletics is studied thoroughly.

**PHYS. ED. 15 y. *Management of Intramural Athletics* (4).**

A senior course required of men whose major is physical education.

Prerequisite, three years of successful participation in intramural athletics.

Designed to give the student practice in supervising, directing, and planning the intramural program.

**PHYS. ED. 21 y. *Survey of Physical Education* (4).**

Sophomore course required of men whose major is physical education; elective for other students.

This course is an introduction to the study of physical education. It includes a survey of the possibilities of the profession.

**PHYS. ED. 23 y. *Technics of Teaching Physical Education* (4).**

Junior course required of men whose major is physical education.

A thorough study of the physiological and psychological aspects of instruction in the performance of physical activities.

\* Students who are registered in the College of Education, or in Rural Life and Agricultural Education or Arts and Science Education curricula, and whose major or minor is Physical Education may take both Basic Military and first and second year Physical Education courses for credit. In all other curricula credit will be allowed for either Basic Military or first and second year Physical Education, but not for both.

**ED. 141 f. *Physical Education in the High School (Boys)* (3).**

**ED. 143 f or s. *Supervised Teaching of Physical Education (Boys)* (2).**

**For Graduates**

**\*\*PHYS. ED. 201 y. *Administration of Health and Physical Education* (6).**

This course is designed to aid in solving the multitude of problems that arise in the administration of health and physical education in public schools. An attempt will be made to set up standards for evaluating the effectiveness of programs of health and physical education. (Mackert.)

**B. Physical Education for Women**

MISS STAMP, MRS. FRASER, MRS. WADE, DR. KARPELES.

**PHYS. ED. 2 y. *Personal Hygiene* (1).**

Freshman course required of all women.

This course consists of instruction in hygiene one period a week throughout the year. The health ideal and its attainments, care of the body relative to diet, exercise, sleep, bathing, etc., and social hygiene.

**PHYS. ED. 4 y. *Physical Activities* (1).**

Freshman course required of all women.

This is an activities course, which meets two periods a week throughout the year. It will present the following phases of physical education: sports, such as hockey, soccer, basketball, baseball, speedball, archery, and volleyball; natural activities, such as tumbling and stunts; and dancing, such as clog, folk, and athletic.

**PHYS. ED. 6 y. *Community Hygiene* (2).**

Sophomore course required of all women.

This course is a continuation of the freshman course. The work in hygiene includes the elements of physiology, the elements of home, school, and community hygiene, and a continuation of social hygiene.

**PHYS. ED. 8 y. *Physical Activities* (2).**

Sophomore course required of all women.

This course is a continuation of the work of the freshman year. In addition to the regular work, the student is permitted to elect clog, folk, or natural dancing.

†PHYS. ED. 10 y. *Fundamentals of Rhythm and Dance* (2)—One lecture a week. Required of all freshman students planning to make physical education a major, and open to other freshmen, sophomores, juniors, and seniors.

The fundamentals of rhythm, principles of class organization, suggested lesson plans for teaching various types of dancing, as well as the aims and objectives of creative dancing will be presented in this course.

\*\*Open to men and women.

†Open to men and women.



PHYS. ED. 12 f. *Games* (2).

Required of all sophomores whose major is physical education, and open to other undergraduates.

This course will aim to present games and stunts suitable for the elementary school and recreational groups. Both theory and practice will be offered.

†PHYS. ED. 16 s. *First Aid* (1).

This course is required of all juniors whose major is physical education.

It presents the fundamentals necessary for caring for accidents and injuries until medical attention can be secured. Practical work will be required of all students.

PHYS. ED. 18 A f; 18 B s. *Athletics* (2-2).

Required one semester of all juniors whose major is physical education, and open to other juniors and seniors.

This course includes one lecture a week, and two periods of practical work each semester. The practical work is organized in a series of sport units, four for each semester, as shown below and designated as "practical sections." Any three of the four may be selected.

First semester (18 f): hockey, soccer, fieldball, basketball. Second semester (18 s): volleyball and handball, speedball, archery, baseball. Instruction will be given in the theory, practice, organization, and teaching of each sport.

PHYS. ED. 20 s. *Natural Gymnastics* (2).

Required of all sophomores with a major in physical education.

This course presents stunts, games, and self-testing activities based upon fundamental movements which are inherent in the race. Teaching technics will be considered and material offered which is suitable to varying age groups.

PHYS. ED. 22 s. *Organization of Athletic Activities for Girls* (2).

This course is open to juniors and seniors with a major in physical education.

A lecture course dealing with the organization of material and the developing of athletic activities for girls in such situations as camp, school, and playground.

PHYS. ED. 26 y. *Coaching and Officiating; Athletics for Girls* (4).

This course is open to seniors with a major in physical education. It trains the student to coach and officiate in women's athletics. Opportunity is given for the student to apply practically the theory and methods which she has learned in this class.

†PHYS. ED. 28 f. *Clogs and Athletic Dances* (2).

Two practical classes a week. Required of all sophomores planning to make physical education a major, and open to other sophomores, juniors, and seniors.

This course includes suitable teaching material for both high school boys and girls.

Tap shoes are required.

†PHYS. ED. 30 s. *Folk Dancing* (2). Two practical classes a week. Required of all sophomores planning to make physical education a major, and open to other sophomores, juniors, and seniors.

This course includes folk dances of various countries.

†PHYS. ED. 32 f or s. *Natural Dancing* (2). Two practical classes a week. This course is required of all juniors planning to make physical education a major, and is open to other juniors and seniors.

This course consists of a type of dancing based upon free and natural movements, such as skipping, walking, and running.

A special costume is required.

†PHYS. ED. 34 f or s. *Advanced Clog* (2).

Two practical classes a week. Open to all students who have had Phys. Ed. 28 f or its equivalent. This course includes more advanced and difficult dances suitable for use with both boys and girls. Tap shoes required.

ED. 140 y. *Physical Education Activities for High School Girls* (4).

ED. 142 f. *Physical Education in the High Schools (Girls)* (2).  
(Not given 1937-1938.)

## ENGINEERING

PROFESSORS STEINBERG, JOHNSON, CREESE, NESBIT; LECTURERS DILL, HALL, KEAR; ASSOCIATE PROFESSOR HODGINS; ASSISTANT PROFESSORS HOSHALL, PYLE, BAILEY, ALLEN, WIKSTROM; MR. ERNST, MR. HENNICK;

ADDITIONAL INSTRUCTORS.

### Civil Engineering

C. E. 101 s. *Hydraulics* (4)—Three lectures; one laboratory. Prerequisite, Mech. 101 f. Required of juniors in Civil Engineering.

Hydrostatic pressures on tanks, drains, and pipes. Flow through orifices, nozzles, pipe lines, open channels, and weirs. Use of Reynold's number. Measurement of water. Elementary hydrodynamics. (Given commencing 1937-1938.) (Ernst.)

†Open to men and women.



C. E. 102 s. *Hydraulics* (3)—Two lectures; one laboratory. Prerequisite, Mech. 102 f. Required of juniors in Electrical and Mechanical Engineering.

A shorter course than C. E. 101 s, with emphasis on water wheels, turbines, and centrifugal pumps. (Given commencing 1937-1938.) (Ernst.)

C. E. 103 f. *Railroad Curves and Earthwork* (3)—Two lectures; one laboratory. Prerequisite, Surv. 2 y. Required of juniors in Civil Engineering.

Computation and field work for simple, compound, and reversed circular curves; easement curves; vertical and horizontal parabolic curves. Analysis of turnouts and computation of earthwork, including haul and mass diagram. (Allen.)

C. E. 104 s. *Theory of Structures* (5)—Four lectures; one laboratory. Taken concurrently with Mech. 101 f. Required of juniors in Civil Engineering.

Analytical and graphical determination of dead and live load stresses in framed structures. Influence lines for reactions, shears, moments, and stresses. Analysis of lateral bracing systems. Elements of slope and deflection; rigid frames. The design of steel, timber, and reinforced concrete members. (Allen.)

C. E. 105 f. *Elements of Highways* (3)—Two lectures; one laboratory. Prerequisite, Mech. 101 f. Required of seniors in Civil Engineering.

Location, construction, and maintenance of roads and pavements. Highway contracts and specifications, estimates of cost, highway economics. The course includes, in addition to lecture and classroom work, field inspection trips. (Steinberg.)

C. E. 106 y. *Concrete Design* (7)—Three lectures, one laboratory first semester; two lectures, one laboratory second semester. Prerequisite, C. E. 104 s. Required of seniors in Civil Engineering.

A continuation of C. E. 104 s, with special application to the design and detailing of plain and reinforced concrete structures, which include slabs, columns, footings, beam bridges, arches, retaining walls, and dams. Applications of slope-deflection and moment distribution theories and rigid frames. (Allen.)

C. E. 107 y. *Structural Design* (7)—Three lectures, one laboratory first semester; two lectures, one laboratory second semester. Prerequisite, C. E. 104 s. Required of seniors in Civil Engineering.

A continuation of C. E. 104 s, with special application to the design and detailing of structural steel sections, members and their connections, for roof trusses, plate girders, highway and railway bridges, buildings, bracing systems, and grillage foundations. (Allen.)

C. E. 108 y. *Municipal Sanitation* (6)—Two lectures; one laboratory. Prerequisite, C. E. 101 s. Required of seniors in Civil Engineering.

Methods of estimating consumption and designing water supply and sewerage systems. (Hall.)

C. E. 109 y. *Thesis* (3)—One laboratory first semester; one lecture, one laboratory second semester. Required of seniors in Civil Engineering.

The student selects, with faculty approval, a subject in civil engineering design or research. He makes such field or laboratory studies as may be needed. Weekly progress reports are required, and frequent conferences are held with the member of the faculty to whom the student is assigned for advice. A written report, including an annotated bibliography, is required to complete the thesis. (Staff.)

C. E. 110 s. *Soils and Foundations* (3)—Two lectures; one laboratory. Prerequisite, C. E. 104 s. Required of seniors in Civil Engineering.

A study of the properties and behavior of soil as an engineering material. Applications to the methods of constructing foundations for highways, bridges, buildings, and other structures. (Given commencing 1937-1938.) (Steinberg.)

### Drawing

DR. 1 A f. *Engineering Drawing* (2)—Two laboratories. Required of freshmen in Engineering.

Lettering, use of instruments, orthographic projection, technical sketches, dimensioning. Drawing from memory; drawing from description; inking, tracing, blueprinting, isometric and oblique projection and sections.

Course A is intended for students who have not had mechanical drawing.

DR. 1 B f. *Engineering Drawing* (2)—Two laboratories.

Advanced engineering drawing, with applications to engineering practice.

Course B is intended for students who have passed an approved high school course in mechanical drawing.

DR. 2 s. *Descriptive Geometry* (2)—One lecture; one laboratory. Prerequisite, Dr. 1 A f or Dr. 1 B f. Required of freshmen in Engineering.

Orthographic projection as applied to the solution of space problems relating to the point, line, and plane. Intersection of planes with solids; development. Applications to practical problems in engineering drafting.

DR. 3 f. *Descriptive Geometry* (2)—One lecture; one laboratory. Prerequisite, Dr. 2 s. Required of sophomores in Engineering.

Continuation of Dr. 2 s, including curves, plane and space, generation of surfaces, tangent planes, intersection and development of curved surfaces. Shades, shadows, and perspective. Applications to practical problems in engineering drafting. (Given commencing 1937-1938).



DR. 4 y. *Mechanical Drawing* (2)—One laboratory. Open to non-engineering students.

Lettering, sketching, and working drawings of machines; including conventions, tracing, isometric and cabinet projections, and blueprinting.

### Electrical Engineering

E. E. 1 s. *Elements of Electrical Engineering* (3)—Two lectures; one laboratory. Taken concurrently with Math. 16 y and 17 y, and Phys. 2 y. Required of sophomores in Electrical Engineering.

Principles involved in flow of direct currents in conductors; current and voltage relations in simple circuits; magnetism and magnetic circuits; electromagnetic induction, dielectric circuits and condensers.

E. E. 101 s. *Principles of Electrical Engineering* (3)—Two lectures; one laboratory. Prerequisites, Phys. 2 y; Math. 16 y and 17 y. Required of juniors in Civil Engineering.

Fundamentals of direct current and alternating current machinery; application of machines for specific duties; operating characteristics of generators, motors, and transformers. (Hodgins.)

E. E. 102 y. *Principles of Electrical Engineering* (8)—Three lectures; one laboratory. Required of seniors in Mechanical Engineering. Prerequisite, senior standing.

Study of elementary direct current and alternating current characteristics. Principles of construction and operation of direct and alternating current machinery. Experiments on the operation and characteristics of generators, motors, transformers, and control equipment. (Wikstrom.)

E. E. 103 f. *Direct Currents* (6)—Four lectures; two laboratories. Prerequisites, Phys. 2 y, Math. 16 y and 17 y, and E. E. 1 s. Required of juniors in Electrical Engineering.

Construction, theory of operation and performance characteristics of direct current generators, motors, and control apparatus. Principles of construction, characteristics and operation of primary and secondary batteries and control equipment. Experiments on battery characteristics, and the operation and characteristics of direct current generators and motors. (Hodgins.)

E. E. 104 s. *Direct Current Design* (1)—One laboratory. Prerequisite, E. E. 103 f. Required of juniors in Electrical Engineering.

Materials of construction and design of the electric and magnetic circuits of direct current generators and motors. (Wikstrom.)

E. E. 105 f. *Electrical Measurements* (4)—Three lectures; one laboratory. Prerequisites, Phys. 2 y, Math. 16 y and 17 y, and E. E. 1 s. Required of juniors in Electrical Engineering.

Theory and application of precision instruments and methods used in direct current measurements of electric and magnetic quantities. (Wikstrom.)

E. E. 106 s. *Alternating Current Circuits* (5)—Three lectures; two laboratories. Prerequisites, E. E. 103 f and E. E. 105 f. Required of juniors in Electrical Engineering.

Introduction to the theory of alternating current circuits, both single phase and polyphase; methods and apparatus used to measure alternating currents, voltage, and power; current and voltage relations in balanced and unbalanced polyphase systems. (Hodgins.)

E. E. 107 y. *Alternating Current Machinery* (8)—Three lectures; one laboratory. Prerequisite, E. E. 106 s. Required of seniors in Electrical Engineering.

Construction, theory of operation and performance characteristics of transformers, alternators, induction motors, synchronous motors, synchronous converters, commutator type motors, and other apparatus; tests and experiments. (Creese.)

E. E. 108 f. *Alternating Current Design* (1)—One laboratory. Prerequisites, E. E. 105 f, E. E. 106 s. Taken concurrently with E. E. 107 y. Required of seniors in Electrical Engineering.

Materials of construction and design of the electric and magnetic circuits of alternating current generators, motors, and transformers. (Hodgins.)

E. E. 109 y. *Electrical Communications* (6)—Two lectures; one laboratory. Prerequisite, E. E. 106 s. Taken concurrently with E. E. 107 y.

Principles of wire and radio communication. Theory and calculation of passive networks including transmission lines and coupled circuits. Theory and calculation of non-linear impedances including the vacuum tube. Introduction to electromagnetic wave propagation. (Kear.)

E. E. 110 f. *Illumination* (3)—Two lectures; one laboratory. Prerequisite, E. E. 106 s. Taken concurrently with E. E. 107 y. Required of seniors in Electrical Engineering.

Electric illumination; principles involved in design of lighting systems, illumination calculations, photometric measurements. (Creese.)

E. E. 111 f. *Electric Railways* (3)—Three lectures. Prerequisite, E. E. 106 s. Taken concurrently with E. E. 107 y.

Mechanism of train motion. Construction of speed-time and power-time curves, and their use in the application of electrical equipment to transportation. Construction, operation, and control of apparatus used in different fields of electrical transportation, such as urban railways, trunk line railways, and busses. Power requirements, distribution systems, and signal systems. (Hodgins.)

E. E. 112 s. *Electric Power Transmission* (3)—Three lectures. Prerequisite, E. E. 106 s. Taken concurrently with E. E. 107 y.

Survey of central station and substation equipment. Calculation of line constants. Mechanical and economical considerations of transmission of power. Fundamentals of transients. (Wikstrom.)



E. E. 113 y. *Thesis* (3)—One laboratory first semester; one lecture, one laboratory second semester. Required of seniors in Electrical Engineering.

The student selects, with faculty approval, a subject in electrical engineering design or research. He makes such field or laboratory studies as may be needed. Weekly progress reports are required, and frequent conferences are held with the member of the faculty to whom the student is assigned for advice. A written report, including an annotated bibliography, is required to complete the thesis. (Staff.)

### General Engineering Subjects

ENGR. 1 f. *Introduction to Engineering* (1)—One lecture. Required of freshmen in Engineering.

A course of lectures by the faculty and by practicing engineers covering the engineering professional fields. The work of the engineer, its requirements in training and character, and the ethics and ideals of the profession. The purpose of this course is to assist the freshman in selecting the particular field of engineering for which he is best adapted.

ENGR. 101 f. *Engineering Geology* (2)—Two lectures. Required of juniors in Civil Engineering.

The fundamentals of geology with engineering applications. (Metzger.)

ENGR. 102 s. *Engineering Law and Specifications* (2)—Two lectures. Required of seniors in Engineering.

A study is made of the fundamental principles of law relating to business and to engineering; including contracts, agency, negotiable instruments, corporations, and common carriers. These principles are then applied to the analysis of general and technical clauses in engineering contracts and specifications. (Steinberg.)

### Mechanics

MECH. 1 s. *Statics and Dynamics* (3)—Two lectures; one laboratory. Taken concurrently with Math. 16 y and 17 y and Phys. 2 y. Required of sophomores in Engineering.

Analytical and graphical solutions of coplanar and non-coplanar force systems; equilibrium of rigid bodies; suspended cables, friction, centroids and moments of inertia; kinematics and kinetics; work, power, and energy; impulse and momentum.

MECH. 101 f. *Strength of Materials* (5)—Four lectures; one laboratory. Prerequisite, Mech. 1 s. Required of juniors in Civil Engineering.

Riveted joints; torsional stresses and strains; beam stresses and deflection; combined axial and bending loads; column stresses; principal stresses and strains; impact and energy loads; statically indeterminate beams; shear center; unsymmetrical bending; composite members including reinforced concrete beams. Instruction in the use of an approved handbook containing the properties of rolled steel sections. (Given commencing 1937-1938.)

(Ernst.)

MECH. 102 f. *Strength of Materials* (4)—Three lectures; one laboratory. Prerequisite, Mech. 1 s. Required of juniors in Electrical and Mechanical Engineering.

A shorter course than Mech. 101 f. Instruction in the use of an approved handbook containing the properties of rolled steel sections. (Given commencing 1937-1938.) (Ernst.)

MECH. 103 s. *Materials of Engineering* (2)—One lecture; one laboratory. Prerequisite, Mech. 101 f or Mech. 102 f. Required of juniors in Engineering.

The composition, manufacture, and properties of the principal materials used in engineering, and of the conditions that influence their physical characteristics. The interpretation of specifications and of standard tests. Laboratory work in the testing of steel, wrought iron, timber, brick, cement, and concrete. (Pyle.)

### Mechanical Engineering

M. E. 1 s. *Kinematics of Machinery* (2)—One lecture; one laboratory. Taken concurrently with Math. 16 y and 17 y, and Phys. 2 y. Required of sophomores in Mechanical Engineering.

The application of the principles involved in determining the design and size of bolts, screws, shafting, and gears. The theory and practice of the kinematics of machinery as applied to ropes, belts, chains, gears, and gear teeth; wheels in trains, cams, linkwork, parallel motions. Miscellaneous mechanisms and aggregate combinations.

M. E. 101 f. *Kinematics of Machinery* (3)—Two lectures; one laboratory. Prerequisite, M. E. 1 s. Required of juniors in Mechanical Engineering.

A continuation of M. E. 1 s, with special emphasis on cams, linkwork, mechanisms, and aggregate combinations. (Given commencing 1937-1938.) (Hoshall.)

M. E. 102 f. *Machine Design* (3)—Two lectures; one laboratory. Prerequisite, Math. 16 y and 17 y, Phys. 2 y. Required of juniors in Mechanical Engineering.

The application of mechanics to the determination of stresses and the proportioning of machine parts. (Given commencing 1937-1938.) (Hoshall.)

M. E. 103 s. *Thermodynamics* (3)—Three lectures. Prerequisites, Math. 16 y and 17 y, Phys. 2 y. Required of juniors in Electrical Engineering.

The theory and application of thermodynamics to the steam engine, steam turbine, nozzles. The properties of vapors, cycles of heat and entropy, including discussion of machines and their uses.

M. E. 104 s. *Thermodynamics* (5)—Four lectures; one laboratory. Prerequisites, Math. 16 y and 17 y, and Phys. 2 y. Required of juniors in Mechanical Engineering.

The properties and fundamental equations of gases and vapors. Thermodynamics of heat cycles, air compressors, and steam engines. (Given commencing 1937-1938.)



M. E. 105 f. *Internal Combustion Engines* (3)—Three lectures. Prerequisite, M. E. 104 s. Required of seniors in Mechanical Engineering.

Theory, construction, and operation of gasoline and oil engines. Design and operation of Otto and Diesel cycle engines. (Nesbit.)

M. E. 106 f. *Heating and Ventilation* (3)—Two lectures; one laboratory. Prerequisite, M. E. 104 s. Required of seniors in Mechanical Engineering.

The study of types of heating and ventilating systems for a particular building; layout of piping and systems, with complete calculations and estimates of costs; fundamentals of air conditioning. (Dill.)

M. E. 107 s. *Refrigeration* (3)—Two lectures; one laboratory. Prerequisite, M. E. 104 s. Required of seniors in Mechanical Engineering.

Problems involving the different methods and processes of refrigeration. Air conditioning for offices, buildings, factories and homes. (Dill.)

M. E. 108 y. *Design of Prime Movers* (6)—Two lectures; one laboratory. Prerequisites, Mech. 102 f, C. E. 102 s. Required of seniors in Mechanical Engineering.

The design and proportioning of parts of essential prime movers for power plants, and industrial uses. (Nesbit.)

M. E. 109 s. *Design of Power Plants* (2)—One lecture; one laboratory. Taken concurrently with M. E. 108 y. Required of seniors in Mechanical Engineering.

The design of power plants, including the layout and cost of building, installation of equipment, and determination of size for most economical operation. (Nesbit.)

M. E. 110 y. *Mechanical Laboratory* (2)—One laboratory. Required of seniors in Mechanical Engineering.

Calibration of instruments, gauges, indicators, steam, gas and water meters. Indicated and brake horsepower of steam and internal combustion engines, setting of valves, tests for economy and capacity of boilers, engines, turbines, pumps, and other prime movers. Feed water heaters and condensers; B. T. U. analysis of solid, gaseous, and liquid fuels, and power plant tests. (Nesbit.)

M. E. 111 y. *Thesis* (3)—One laboratory first semester; one lecture, one laboratory second semester. Required of seniors in Mechanical Engineering.

The student selects, with faculty approval, a subject in mechanical engineering design or research. He makes such field or laboratory studies as may be needed. Weekly progress reports are required, and frequent conferences are held with the member of the faculty to whom the student is assigned for advice. A written report, including an annotated bibliography, is required to complete the thesis. (Staff.)

M. E. 112 f. *Principles of Mechanical Engineering* (3)—Two lectures; one laboratory. Required of juniors in Civil Engineering. Prerequisites, Math. 16 y and 17 y, and Phys. 2 y.

Elementary thermodynamics and the study of heat, fuel, and combustion in the production and use of steam for the generation of power. Includes study of fundamental types of steam boilers, fuel burning equipment, prime movers, and their allied apparatus. Supplemented by laboratory tests and trips to industrial plants.

M. E. 113 s. *Power Plants* (3)—Two lectures; one laboratory. Required of seniors in Electrical Engineering. Prerequisite, senior standing.

A study of heat, fuel, and combustion in the production and use of steam for the generation of power. Includes the theory and operation of steam engines, boilers, condensers, steam turbines, and their accessories. Practical power problems as applied to typical power plants, supplemented by laboratory tests and trips to industrial plants.

### Shop

SHOP 1 s. *Forge Practice* (1)—One combination lecture and laboratory. Required of freshmen in Engineering.

Lectures and recitations on the principles of forging and heat treatment of steel. Demonstrations in acetylene and electric welding, brazing, cutting, and case hardening. Laboratory practice in drawing, bending, upsetting, welding, hardening, tempering, and thread cutting.

SHOP 2 f. *Machine Shop Practice* (1)—One laboratory. Required of sophomores in Electrical Engineering.

Practice in bench work, turning, planing, drilling, and pipe threading.

SHOP 3 f. *Machine Shop Practice* (2)—One lecture; one laboratory. Required of sophomores in Mechanical Engineering.

Study of the fundamental principles of machine tools, such as lathe, planer, shaper, milling machine, drilling machine, and grinding machines. Calculation for cutting threads, spur and helical gears, and fluting.

Practice in bench work, turning, planing, drilling, and pipe threading.

SHOP 4 y. *Wood Shop* (2)—One laboratory. Open to non-engineering students.

Use and care of wood-working tools and exercises in sawing, planing, turning, furnishing, and laying out work from blueprints. (A charge will be made for materials actually used, approximately \$2.00 a semester.)

SHOP 101 f. *Machine Shop Practice* (1)—One laboratory. Required of juniors in Mechanical Engineering.

Advanced practice with standard machine tools. Exercises in thread cutting, surface grinding, fluting, and cutting spur and helical gears.

(Hoshall.)



SHOP 102 s. *Foundry Practice* (1)—One combination lecture and laboratory. Required of juniors in Mechanical Engineering.

Lectures and recitations on foundry products and layout, materials and equipment, hand and machine moulding, cupola practice and calculating mixes. Core making, moulding, casting in aluminum, brass, and gray iron. (Hoshall.)

### Surveying

SURV. 1 f and s. *Elements of Plane Surveying* (1)—Combined lecture and laboratory work. Prerequisites, Math. 11 f, 12 f, 14 s, 15 s. Required of sophomores in Electrical and Mechanical Engineering.

A brief course in the use of the tape, compass, level, transit, and stadia. Computations for area, coördinates, volume, and plotting.

SUR. 2 y. *Plane Surveying* (5)—One lecture; one laboratory first semester; one lecture, two laboratories second semester. Prerequisites, Math. 11 f, 12 f. Required of sophomores in Civil Engineering.

Theory of and practice in the use of the tape, compass, transit, and level. General survey methods, traversing, area, coördinates, profiles, cross-sections, volume, stadia, latitude, longitude, azimuth, time. (Given commencing 1937-1938.)

SURV. 101 f. *Advanced Surveying* (4)—Two lectures; two laboratories. Prerequisite, SURV. 2 y. Required of juniors in Civil Engineering.

Adjustment of instruments, triangulation, precise leveling, geodetic surveying, together with the necessary adjustments and computations. Topographic surveys. Plane table, land surveys, and boundaries. Mine, tunnel, and hydrographic surveys. (Pyle.)

## ENGLISH LANGUAGE AND LITERATURE

PROFESSORS HOUSE, HALE, WARFEL;

ASSOCIATE PROFESSOR HARMAN; ASSISTANT PROFESSORS LEMON,

FITZHUGH; MR. MURPHY, MR. SIXBEY, MISS IDE, MR. BRYAN,

MR. BALL, MR. HOLMES, DR. PLATZ, MR. HOADLEY, MISS SKINNER.

ENG. 1 y. *Survey and Composition I* (6)—Three lectures. Freshman year. Prerequisite, three units of high school English and successful passing of the qualifying examination given by the Department, or successful completion of English A. Required of all four-year students.

A study of style, syntax, spelling, and punctuation, combined with an historical study of the literature of the 19th Century. Written themes, book reviews, and exercises. Each semester of this course will be repeated in the following semester.

ENG. A f. *Special Preparatory Course* (0)—Three lectures. Freshman year. Prerequisite, three units of high school English. Required of all students who fail to pass the qualifying examination. Students who show sufficient progress after five weeks of English A will be transferred to English 1 y. Others will continue with English A for one semester. The department reserves the right to transfer students who make unsatisfactory progress from English 1 y to English A f.

A course in grammatical and rhetorical principles designed to help students whose preparation has been insufficient for English 1 y. Exercises, conferences, *précis* writing. This course will be repeated in the second semester.

ENG. 2 f. *Survey and Composition II* (3)—One general lecture given by various members of the department, two quiz sections. Sophomore year. Prerequisite, Eng. 1 y. Required of all students in the College of Arts and Sciences.

A continuation of work in composition based on the work accomplished in Eng. 1 y. An historical study of English literature from the beginnings to the 19th Century. Themes, book reports, conferences.

ENG. 3 s. *Survey and Composition II* (3)—One lecture, two quiz sections. Prerequisites, Eng. 1 y and Eng. 2 f. Continuation of Eng. 2 f.

ENG. 4 f or s. *Business English* (2)—Two lectures. Prerequisite, Eng. 1 y. Course complete in one semester, but may be taken in either semester.

This course develops the best methods of effective expression, both oral and written, used in business activities.

ENG. 5 f. *Expository Writing* (2)—Two lectures. Prerequisite, Eng. 1 y. Study of the principles of exposition. Analysis and interpretation of material bearing upon scientific matter. Themes, papers, and reports.

ENG. 6 s. *Expository Writing* (2)—Two lectures. Prerequisite, Eng. 5 f. Continuation of Eng. 5 f.

ENG. 7 f. *Survey of American Literature* (3)—Three lectures. Prerequisite, Eng. 1 y.

American thought and expression from 1607 to 1865, with emphasis upon colonial cultural patterns, upon the rise of nationalism, and upon sectional conflict. Reports and term paper.

ENG. 8 s. *Survey of American Literature* (3)—Three lectures. Prerequisite, Eng. 1 y.

Continuation of Eng. 7 f, with emphasis upon the changing social forces which influenced American writers after 1865. Reports and term paper.

ENG. 9 f. *Minor Victorian Poets* (3)—Three lectures. Prerequisite, Eng. 1 y.

Arnold, Clough, James Thompson, Swinburne, and others.

ENG. 10 s. *Modern Poets* (3)—Three lectures. Prerequisite, Eng. 1 y. Frost, Noyes, Masfield, Brooke, Moody, Benet, and others.



ENG. 11 f. *Shakespeare* (3)—Three lectures. Prerequisite, Eng. 1 y. An intensive study of selected plays.

ENG. 12 s. *Shakespeare* (3)—Three lectures. Prerequisite, Eng. 1 y. Continuation of Eng. 11 f.

ENG. 13 s. *Introduction to Narrative Literature* (2)—Two lectures. Prerequisite, Eng. 1 y. Not open to freshmen.

An intensive study of representative stories, with lectures on the history and technique of the short story and of other narrative forms.

#### For Advanced Undergraduates and Graduates

ENG. 100 f and s. *Advanced Composition* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s. Course complete in one semester, but may be taken a second semester for credit. Required of all students whose major is English. Open to others by permission of instructors.

Theory and practice in the larger forms, the types to be varied each semester at the election of the class. (Staff.)

\*ENG. 101 f. *College Grammar* (3)—Three lectures. Prerequisite, Eng. 1 y. Required of students preparing to teach English, and an alternative requirement with Anglo-Saxon for others whose major is English.

Studies in the descriptive grammar of modern English. (Harman.)

\*ENG. 102 s. *History of the English Language* (3)—Three lectures. Prerequisite, Eng. 101 f. Alternative requirement with Anglo-Saxon for students whose major is English.

An historical survey of the English language: its nature, origin, and development, with special stress upon structural and phonetic changes in English speech and upon the rules which govern modern usage. (Harman.)

\*ENG. 103 y. *Anglo-Saxon* (6)—Three lectures. Prerequisite, Eng. 1 y. Alternative requirement with College Grammar and History of the English Language for students whose major is English.

A study of Anglo-Saxon (Old English) grammar and literature. Lectures on the principles of phonetics and comparative philology. (House.)

ENG. 104 y. *Chaucer and Other Poetry of the 14th Century* (4)—Two lectures. Prerequisite, Eng. 1 y and Eng. 2 f and 3 s.

A study of the principal poets and poems of England in the 14th Century, including Chaucer, Langland, *Gawaine and the Green Knight*, *The Pearl*, and early poems about Arthur. Chaucer and Langland will be read in the original; other works in modernized versions. (Hale.)

ENG. 105 f. *Medieval Drama in England* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of the development of medieval English drama from its beginning to 1540. Class discussion of significant plays, outside reading, reports.

(Fitzhugh.)

\*A student whose major is English is required to take Eng. 103 y. or Eng. 101 f and Eng. 102 s.

ENG. 106 s. *Elizabethan Drama* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of the change in spirit and form of English drama from 1540 to 1640, as seen in the works of the important dramatists other than Shakespeare. Class discussion of significant plays, outside reading, reports. (Fitzhugh.)

ENG. 107 s. *Elizabethan Non-Dramatic Literature* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Survey of the non-dramatic poetry and prose from 1557 to 1600, with emphasis upon the sonnet cycle, the epic, and the beginnings of fiction. (Not given in 1937-1938.) (Warfel.)

ENG. 108 f. *Milton* (2)—Two lectures. Prerequisites, Eng. 1 y and 2 f and 3 s.

A study of the poetry and the chief prose works. (Not given in 1937-1938.) (Murphy.)

ENG. 109 f. *Literature of the Seventeenth Century to 1660* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of the chief prose writers and of the Metaphysical and Cavalier traditions in poetry. (Murphy.)

ENG. 110 s. *The Age of Dryden* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

This course emphasizes the relation of literature to the philosophical movements of the age. (Murphy.)

ENG. 111 f. *Literature of the Eighteenth Century* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Readings in the period dominated by Defoe, Swift, Addison, Steele, and Pope. (Not given in 1937-1938.) (Fitzhugh.)

ENG. 112 s. *Literature of the Eighteenth Century* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A continuation of Eng. 111 f. Dr. Johnson and his Circle; the Rise of Romanticism; the Letter Writers. (Not given in 1937-1938.) (Fitzhugh.)

\*ENG. 113 f. *Prose and Poetry of the Romantic Age* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of the development of the Romantic movement in England as exemplified by the prose and poetry of Wordsworth, Coleridge, Lamb, De Quincey, Landor, and others. (Hale.)

\*ENG. 114 s. *Prose and Poetry of the Romantic Age* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of the late Romantic writers, including Byron, Shelley, Keats, Moore, Scott, and others. (Hale.)

\*Eng. 113 f and Eng. 114 s may be counted as Comparative Literature by students who have had Comp. Lit. 105 f and Comp. Lit. 106 s.



ENG. 115 f. *Scottish Poetry* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s. No knowledge of the Scottish dialect required.

Readings in the Scottish Chaucerians; Drummond of Hawthornden; song and ballad literature; poets of the vernacular revival: Ramsay, Ferguson, and Burns. Papers and reports. (Fitzhugh.)

ENG. 116 f. *Tennyson* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Wide reading of the poems, with detailed study of *The Princess*. (House.)

ENG. 117 s. *Browning* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Study of selections from Browning other than the dramas. (House.)

ENG. 119 s. *The Letter as a Literary Type* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Beginning with the Paston letters, the course is designed as a study of English and American letters, with special attention to use and changes in prose style. (Lemon.)

ENG. 120 f. *The Novel* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Lectures on the principles of narrative structure and style. Class reviews of selected novels, chiefly from English and American sources. (House.)

ENG. 121 s. *The Novel* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Continuation of Eng. 120 f.

ENG. 122 f. *English and American Essays* (2)—Two lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of the philosophical, critical, and familiar essays of England and America. Bacon, Lamb, Macaulay, Emerson, Chesterton, and others. (House.)

ENG. 123 f. *Modern Drama* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A survey of English drama during the two centuries from 1660 to 1860. Class discussion of significant plays, outside reading, reports. (Not given in 1937-1938.) (Fitzhugh.)

ENG. 124 s. *Contemporary Drama* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

A study of significant European and American dramatists from Ibsen to O'Neill. Class discussion of significant plays, outside reading, reports. (Not given in 1937-1938.) (Fitzhugh.)

ENG. 125 f. *Emerson and American Transcendentalism* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Study of the writings of the Concord group: Emerson, Thoreau, Hawthorne, Parker, Alcott, and Margaret Fuller. (Warfel.)

ENG. 126 s. *Whitman, Twain, and the Rise of Realism* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Intensive study of the writings of Whitman, Twain, the local colorists, and the early realists. (Warfel.)

ENG. 127 f. *Contemporary American Poetry and Prose* (3)—Three lectures. Prerequisites, Eng. 1 y and Eng. 2 f and 3 s.

Tendencies and forms in non-dramatic literature since 1920. (Not given in 1937-1938.) (Warfel.)

#### For Graduates

ENG. 201. *Research* (2-4). Credit proportioned to the amount of work and ends accomplished.

Original research and the preparation of dissertations looking towards advanced degrees. (Staff.)

ENG. 202 y. *Beowulf* (4)—Two lectures. Prerequisite, Eng. 103 y.

Critical study of grammar and versification, with some account of the legendary lore. (Not given in 1937-1938.) (Harman.)

ENG. 203 f. *Middle English* (2)—Two lectures. Prerequisite, Eng. 103 y.

A study of readings of the Middle English period, with reference to etymology and syntax. (House.)

ENG. 204 s. *Gothic* (2)—Two lectures. Prerequisite, Eng. 103 y.

A study of the forms and syntax, with readings from the *Ulfilas Bible*. Correlation of Gothic speech sounds with those of Old English. (House.)

ENG. 205 s. *Browning's Dramas* (2)—Two lectures.

*Luria, The Return of the Druses, Pippa Passes, Colombe's Birthday, A Blot in the 'Scutcheon*, and others. (Not given in 1937-1938.) (House.)

ENG. 206 f. *Shakespeare Seminar* (2)—Two lectures. Prerequisites, Eng. 11 f and Eng. 12 s.

A survey of Shakespeare's complete works, with special attention to major problems in Shakespeare. (Not given in 1937-1938.) (Harman.)

ENG. 207 y. *Medieval Romance in England* (4)—Two lectures.

Lectures and readings in the cyclical and non-cyclical romances in Medieval England, and their sources, including translations from the Old French. (Not given in 1937-1938.) (Hale.)

ENG. 208 s. *Seminar in Eighteenth Century Literature* (2)—Two lectures.

Intensive study of one man's work or of one important movement of the century. (Fitzhugh.)



ENG. 209 y. *Seminar in American Literature* (4)—Two lectures. Critical and biographical problems in nineteenth-century American literature. (Warfel.)

ENG. 210 f. *Seminar in the Romantic Period* (2)—Two lectures. Prerequisites, Eng. 115 f and Eng. 116 s or an equivalent satisfactory to the instructor. One discussion period of two hours.

Special studies of problems or persons associated with the Romantic movement. The subject-matter of the course will vary with the interests of the class. (Hale.)

ENG. 211 s. *Victorian Prose* (2)—Two lectures. English prose from about 1830. Study devoted chiefly to Carlyle, Mill, Arnold, Ruskin. (House.)

## ENTOMOLOGY

PROFESSOR CORY; LECTURERS SNODGRASS, YEAGER, HYSLOP; ASSISTANT PROFESSOR KNIGHT; MR. ABRAMS, DR. DITMAN, DR. LANGFORD, MR. MCCONNELL, MR. BUDDINGTON.

ENT. 1 f or s. *Introductory Entomology* (3)—Two lectures; one laboratory. Prerequisite, Zool. 1 f or s.

The relations of insects to the daily life and activities of the student. General principles of structural and systematic entomology. Field work and the preparation of a collection of insects.

ENT. 2 y. *Insect Morphology and Taxonomy* (6)—A two-semester course. Two laboratories. Credit not given for second semester alone. Prerequisite, Ent. 1 f or s.

Studies of the anatomy, physiology, and taxonomy of insects. A fundamental course given in preparation for most of the advanced courses. Lectures given at opportune times during laboratory periods.

ENT. 3 s. *Insect Biology* (3)—Two lectures; one laboratory. Prerequisite, Ent. 1 f or s.

A continuation of general entomological problems begun in the first course, with particular emphasis on the adaptations, ecology, interrelations, and behavior of insects.

ENT. 4 f. *Beekeeping* (2). One lecture; one laboratory. Prerequisite, Zool. 1 s.

History of beekeeping, natural history and behavior of the honeybee. A study of the beekeeping industry. A non-technical course intended to acquaint the student with the honeybee as an object of biological and cultural interest, and to serve as an introduction to the science of apiculture.

ENT. 5 s. *Insecticides and Their Application* (1)—One laboratory. Prerequisite, Ent. 1 f or s.

The principles of insecticides, their chemistry, preparation, and application; construction, care, and use of spray and dusting machinery; fumigation; methods and apparatus in mechanical control. (Not offered in 1937-1938.)

ENT. 6 f. *Apiculture* (3)—Two lectures; one laboratory. Prerequisites, Zool. 1 f or s, and Ent. 1 f or s.

A study of the life history, yearly cycle, behavior, and activities of the honeybee. The value of honeybees as pollenizers of economic plants and as producers of honey and wax. Designed to be of value to the student of agriculture, horticulture, entomology, and zoology.

ENT. 7 s. *Apiculture* (3)—Two lectures; one laboratory. Prerequisite, Ent. 6 f.

Theory and practice of apiary management. Designed for the student who wishes to keep bees or desires a knowledge of practical apiary management.

ENT. 8 y. *Entomological Technic and Scientific Delineation* (4)—Two laboratories. Prerequisite, Ent. 1 f or s.

Collecting, rearing, preserving, and mounting of insects. The preparation of exhibits, materials for instruction, entomological records. Methods of illustrating, including drawing, photography, lantern slide making, and projection. Useful for prospective teachers of biology as well as for the entomological student. (Not offered in 1937-1938.)

## For Advanced Undergraduates and Graduates

ENT. 101 y. *Economic Entomology* (4)—Two lectures.

An intensive study of the problems of applied entomology, including life history, ecology, behavior, distribution, parasitism, and control. (Not given in 1937-1938.) (Cory.)

ENT. 102 y. *Economic Entomology* (4)—Two laboratories.

Expansion of Ent. 101 y to include laboratory and field work in economic entomology. (Not given in 1937-1938.) (Cory.)

ENT. 103 y. *Seminar* (2).

Presentation of original work, book reviews, and abstracts of the more important literature. (Cory, Knight.)

ENT. 104 y. *Insect Pests of Special Groups* (6)—Two lectures; one laboratory. Prerequisite, Ent. 1 f or s.

A study of the principal insects of one or more of the following groups, founded upon food preferences and habitat. The course is intended to give the general student a comprehensive view of the insects that are of importance in his major field of interest and detailed information to the student specializing in entomology.



Insect Pests of 1. Fruit. 2. Vegetables. 3. Flowers, both in the open and under glass. 4. Ornamentals and Shade Trees. 5. Forests. 6. Field Crops. 7. Stored Products. 8. Live Stock. 9. The Household. (Cory.)

ENT. 105 f. *Medical Entomology* (2)—Two lectures. Prerequisite, Ent. 1 f or s, and consent of instructor.

The relation of insects to diseases of man, directly and as carriers of pathogenic organisms. Control of pests of man. The fundamentals of parasitology. (Knight.)

ENT. 106 f or s. *Insect Taxonomy* (3)—Two lectures; one laboratory.

An advanced course dealing with the principles and practices underlying modern systematic entomology. (Hyslop.)

ENT. 107 s. *Theory of Insecticides* (2)—Two lectures.

The development and use of contact and stomach poisons, with regard to their chemistry, toxic action, compatability, and foliage injury. Recent work with insecticides will be especially emphasized. (Ditman.)

ENT. 109 s. *Insect Physiology* (2)—Two lectures; occasional demonstrations. Enrollment subject to consent of instructor.

The functioning of the insect body with particular reference to blood, circulation, digestion, absorption, excretion, respiration, reflex action and the nervous system, and metabolism. (Yeager.)

ENT. 110 f or s. *Special Problems*. Credit and prerequisite to be determined by the staff.

The intensive investigation of some entomological subject. A report of the results is submitted as part of the requirements for graduation. (Cory and Staff.)

ENT. 111 s. *Coccidology* (2)—Two laboratories.

A study of morphology, taxonomy, and biology of the higher groups of the scale insects. The technic of preparation and microscopy are emphasized. Laboratory studies are supplemented by occasional lectures. (McConnell.)

#### For Graduates

ENT. 201 y. *Advanced Entomology* (1-3)—One lecture; one laboratory by arrangement.

Studies of minor problems in morphology, taxonomy, and applied entomology, with particular reference to preparation for individual research. (Cory.)

ENT. 202 y. *Research in Entomology*.

Advanced students having sufficient preparation, with the approval of the head of the department, may undertake supervised research in morphology, taxonomy, or biology and control of insects. Frequently the student may be allowed to work on Station or State Horticultural Department projects. The student's work may form a part of the final report on the project and

be published in bulletin form. A dissertation suitable for publication must be submitted at the close of the studies as a part of the requirements for an advanced degree. (Cory.)

ENT. 203 f. *Insect Morphology* (2-4)—Two lectures, and laboratory work by special arrangement, to suit individual needs.

Insect anatomy with special relation to function. Given particularly in preparation for work in physiology and other advanced studies. (Snodgrass.)

ENT. 204 y. *Economic Entomology* (6)—Three lectures. Studies of the principles underlying applied entomology, and the most significant advances in all phases of entomology. (Cory.)

ENT. 205 s. *Insect Ecology* (2)—One lecture; one laboratory.

A study of the fundamental factors involved in the relationship of insects to their environment. Emphasis is placed on the insect as a dynamic organism adjusted to the environment. (Langford.)

#### FARM FORESTRY

PROFESSOR BESLEY.

FOR. 1 s. *Farm Forestry* (3)—Two lectures; one laboratory. Alternate year course. Junior and senior years. Prerequisite, Bot. 101 f.

A study of the principles and practices involved in managing woodlands on the farm. The course covers briefly the identification of trees; forest protection; management, measurement, and utilization of forest crops; nursery practice; and tree planting. The work is conducted by means of lectures and practice in the woods.

#### FARM MANAGEMENT

PROFESSOR W. T. L. TALIAFERRO.

F. M. 1 s. *Farm Accounting* (3)—Two lectures; one laboratory. Open to juniors and seniors.

A concise practical course in the keeping of farm accounts and in determining the cost of farm production.

F. M. 2 f. *Farm Management* (4)—Four lectures.

The business of farming from the standpoint of the individual farmer. This course aims to connect the principles and practice which the student has acquired in the several technical courses and to apply them to the development of a successful farm business.

See also Agricultural Economics, page 192.



## GENETICS AND STATISTICS

PROFESSOR KEMP.

GEN. 101 f. *Genetics* (3)—Three lectures.

A general course designed to give an insight into the principles of genetics, or of heredity, and also to prepare students for later courses in the breeding of animals or of crops.

GEN. 102 s. *Advanced Genetics* (2)—Two lectures. Prerequisite, Gen. 101 f. Alternate year course.

A consideration of chromosome irregularities and other mutations, interspecies crosses, identity of the gene, genetic equilibrium, and the results of attempts to modify germplasm.

GEN. 111 f. *Statistics* (2)—Two lectures.

The course includes a study of expressions of type, variability, correlation, regression, error, and significance of differences.

GEN. 112 s. *Advanced Statistics* (2)—Two lectures. Prerequisite, Gen. 111 f or its equivalent.

A study of the theory of error, measures of relationship, multiple and partial correlation, predictive formulas, curve fitting, and analysis of variance.

GEN. 114 s. *Elements of Statistics* (3)—Three lectures. Required of students in Business Administration.

A study of the fundamental principles used in statistical investigation, together with the making of diagrams, graphs, charts, and tables.

GEN. 201 y. *Plant Breeding*. Credit according to work done.

GEN. 209 y. *Research*—Credit according to work done.

## GEOLOGY

PROFESSOR BRUCE.

GEOL. 1 f. *Geology* (3)—Two lectures; one laboratory.

A textbook, lecture, and laboratory course, dealing with the principles of geology and their application to agriculture. While this course is designed primarily for agriculture students in preparation for technical courses, it may also be taken as part of a liberal education.

## GREEK

\*PROFESSOR SPENCE.

GREEK 1 y. *Elementary Greek* (6)—Three lectures.

Drill and practice in the fundamentals of Greek grammar and the acquisition of a vocabulary, with translation of simple prose.

GREEK 2 y. *Greek Grammar, Composition, and Translation of Selected Prose Work* (8)—Four lectures. Prerequisite, Greek 1 y or two entrance units in Greek.

\*Deceased Feb. 12, 1937.

## HISTORY

PROFESSOR BAKER-CROTHERS; DR. THATCHER, DR. VOLLBRECHT,  
MR. SILVER, MISS MORRIS.

H. 1 y. *General European History* (6)—Two lectures and one discussion a week.

A general course in European History, covering the important institutions of the Middle Ages and the main events and movements in Modern History.

H. 2 y. *American History* (6)—Two lectures and one discussion section. Open to sophomores.

An introductory course in American History from the discovery of the New World to the present time.

H. 3 y. *History of England and Greater Britain* (6)—Two lectures and one discussion covering the lectures and assignments.

A survey course of English History from earliest times to the World War.

H. 5 f. *Ancient History* (2)—Two lectures.

A general survey course—the Near East, Greece and Rome.

H. 6 s. *Ancient History* (2)—Two lectures.

A continuation of H. 5 f.

### For Advanced Undergraduates and Graduates

H. 101 y. *American Colonial History* (6)—Three lectures. Prerequisite, H. 2 y.

A study of the political, economic, and social development of the American people from the discovery of America through the formation of the Constitution. (Baker-Crothers.)

H. 102 y. *Recent American History* (6)—Three lectures. Prerequisite, H. 2 y.

The history of national development from the close of the Civil War to the present time. (Thatcher.)

H. 104 f. *Social and Economic History of the United States* (3)—Three lectures. Prerequisite, H. 2 y.

An advanced course, giving a synthesis of American life from 1607 to 1790. (Baker-Crothers.)

H. 105 s. *Social and Economic History of the United States* (3)—Three lectures. Prerequisite, H. 2 y.

This course is similar to H. 104 f., and covers the period from 1790 to 1860. (Baker-Crothers.)

H. 106 f. *Diplomatic History of the United States* (2)—Two lectures. Prerequisite, H. 2 y.

A study of American foreign policy. (Thatcher.)



H. 107 s. *Diplomatic History of the United States* (2)—Two lectures. Prerequisite, H. 2 y.

This course is a continuation of H. 106 f. (Thatcher.)

H. 108 f. *Constitutional History of the United States* (3)—Three lectures. Prerequisite, H. 2 y.

A study of the historical forces resulting in the formation of the Constitution, and of the development of American constitutionalism in theory and practice thereafter. (Thatcher.)

H. 109 s. *Constitutional History of the United States* (3)—Three lectures. Prerequisite, H. 2 y.

A continuation of H. 108 f. (Thatcher.)

H. 110 f. *History of the United States, 1789-1865* (2)—Two lectures. Prerequisite, H. 2 y.

The history of national development to the end of the Civil War. (Thatcher.)

H. 111 s. *History of the United States, 1789-1865* (2)—Two lectures. Prerequisite, H. 2 y.

This course is a continuation of H. 110 f. (Thatcher.)

H. 115 y. *Medieval Civilization* (4)—Two lectures. Prerequisite H. 1 y.

The cultural, institutional, economic, and political development of Europe from the decline of the Roman Empire to the opening of the Fourteenth Century. (Vollbrecht.)

H. 117 f. *Renaissance and Reformation* (2)—Two lectures. Prerequisite, H. 1 y.

A detailed study of movements and leaders as vital factors in the transition from mediaeval to modern times. (Vollbrecht.)

H. 118 s. *Renaissance and Reformation* (2)—Two lectures. Prerequisite, H. 1 y.

This course is a continuation of H. 117 f. (Vollbrecht.)

H. 119 f. *Revolutionary and Napoleonic Europe* (2)—Two lectures. Prerequisite, H. 1 y.

The course deals with the French Revolution and the relations of Revolutionary France with the rest of Europe. (Silver.)

H. 120 s. *Revolutionary and Napoleonic Europe* (2)—Two lectures, Prerequisite, H. 1 y.

This course is a continuation of H. 119 f. (Silver.)

H. 121 f. *Expansion of Europe* (3)—Three lectures. Prerequisite, H 1 y.

A treatment of European History from the Crusades to the present, emphasizing especially the expansion of national states. (Silver.)

H. 122 s. *Expansion of Europe* (3)—Three lectures. Prerequisite, H 1 y.

This course is a continuation of H. 121 f. (Silver.)

H. 123 f. *Diplomatic History of Europe since 1871* (3)—Three lectures. Prerequisite, H. 1 y.

A study of European alliances and alignments. World politics and imperialism in the pre-World War period, and developments since the World War. (Vollbrecht.)

H. 124 s. *Diplomatic History of Europe since 1871* (3) — Three lectures. Prerequisite, H. 1 y.

This course is a continuation of H.123 f. (Vollbrecht.)

H. 125 f. *Constitutional History of England* (3)—Three lectures. Prerequisite, H. 1 y or H. 3 y.

This course traces the historical development of English political institutions. (Silver.)

H. 126 s. *Constitutional History of England* (3)—Three lectures. Prerequisite, H. 1 y or H. 3 y.

This course is a continuation of H. 125 f. (Silver.)

H. 127 f. *Europe since 1815* (3)—Three lectures and assignments. Prerequisite, H 1 y.

An intensive course in European History from 1815 to the present time. (Not given in 1937-1938.) (Vollbrecht.)

H. 128 s. *Europe since 1815* (3)—Three lectures and assignments. Prerequisite, H. 1 y.

This course is a continuation of H. 127 f. (Not given in 1937-1938.) (Vollbrecht.)

#### For Graduates

H. 200 y. *Research* (2-4)—Credit proportioned to the amount of work. (Staff.)

H. 201 y. *Seminar in American History* (4)—Conferences and reports on related topics. (Baker-Crothers.)

H. 202 y. *Bibliography and Historical Criticism* (4). (Staff.)

#### HOME ECONOMICS

PROFESSORS MOUNT, McFARLAND, WELSH; ASSOCIATE PROFESSOR MURPHY; ASSISTANT PROFESSOR WESTNEY; MRS. ENGLUND.

#### Textiles and Clothing

H. E. 11 f. *Textiles and Clothing* (3)—Two recitations; one laboratory. History of textile fibers; clothing budget; care of clothing; construction of one garment of wool and one of silk. (Westney.)



H. E. 12 s. *Textiles and Clothing* (3)—One recitation; two laboratories. Standardization and identification of textile fibers and materials. Construction of tailored suit; application of construction methods used by the trade. (Westney.)

#### For Advanced Undergraduates

H. E. 111 f. *Advanced Clothing* (3)—Three laboratories. Prerequisites, H. E. 11 f and H. E. 12 s or equivalent.

The principles governing modeling and draping of garments; specific applications in paper and materials. (Westney.)

H. E. 112 s. *Special Clothing Problems* (3)—One recitation; two laboratories. Prerequisite, H. E. 111 f.

Each student selects and develops three individual clothing problems. (Westney.)

H. E. 113 f. *Problems and Practice in Textiles, Clothing, or Related Art*. (4).

Investigations pertaining to subjects in textiles, clothing, or related art. (McFarland.)

H. E. 114 f or s. *Advanced Textiles* (3)—Two recitations; one laboratory.

Advanced study of textiles; historic textiles; the textile industry as it affects the consumer; eight trips to museums and stores. (Westney.)

### FOODS AND NUTRITION

H. E. 31 y. *Foods* (6)—One recitation; two laboratories. Prerequisite, Chem. 1 y.

Principles of food preparation; composition of foods; planning and serving of meals. (Welsh, Englund, and Riedel.)

#### For Advanced Undergraduates

\*H. E. 131 f or s. *Nutrition* (3)—Three recitations. Prerequisites, H. E. 31 y and Chem. 12 f.

Nutritive value, digestion and assimilation of foods. (Welsh.)

H. E. 132 s. *Dietetics* (3)—Three recitations. Prerequisite, H. E. 131 f. Selection of food to promote health; diet in disease. (Welsh.)

H. E. 133 f. *Demonstrations* (2)—Two laboratories. Practice in demonstrations. (Welsh.)

H. E. 134 s. *Advanced Foods* (3)—One recitation; two laboratories. Prerequisite, H. E. 31 y.

Advanced study of manipulation of food materials. (Welsh.)

\*H. E. 131 f is repeated in the second semester as H. E. 131 s, for Prenursing students.

H. E. 135 f. *Problems and Practice in Foods* (4). Experimental foods. (Welsh, Englund.)

H. E. 136 s. *Child Nutrition* (2)—Two recitations. Lectures and discussions relating to the principles of child nutrition.

#### For Graduates

H. E. 201 f or s. *Seminar in Nutrition* (3).

Oral and written reports on assigned readings in the current literature of Nutrition. Preparation and presentation of reports on special topics.

H. E. 202 f or s. *Research*. Credit to be determined by amount and quality of work done.

With the approval of the head of the department, the student may pursue an original investigation in some phase of foods. The result may form the basis of a thesis for an advanced degree.

H. E. 203 f or s. *Advanced Experimental Foods* (3)—One recitation; two laboratories.

Experimental work with foods.

### ART

H. E. 21 s. *Design* (3)—One recitation; two laboratories.

Elements of design; application of design principles to daily living; practice in designing. (McFarland.)

H. E. 22 s. *Still Life* (1)—One laboratory. Prerequisite, H. E. 21 f. Work in charcoal and color. (McFarland.)

H. E. 23 s. *Figure Sketching* (1)—One laboratory. Alternates with Still Life (H. E. 22 s.) (McFarland.)

H. E. 24 f. *Costume Design* (3)—One recitation; two laboratories. Prerequisite, H. E. 21 f.

A study of fundamentals underlying taste, fashion, and design as they relate to the expression of individuality in dress. (McFarland.)

#### For Advanced Undergraduates

H. E. 121 y. *History of Architecture and Interior Decoration* (6)—Two recitations; one laboratory. Prerequisite, H. E. 21 f.

Study of historic styles of architecture and period furniture: their adaptation and use in modern architecture and furniture.

Historic designs of rugs, tapestries, draperies, etc.: their use in interior decoration and influence upon modern textile design. Application of the principles of design, line-proportion, etc., color, harmony, balance, rhythm, emphasis, to interior decoration. (Murphy.)



H. E. 122 s. *Applied Art* (1)—One laboratory.

Application of the principles of design and color to practical problems.  
(Murphy.)

H. E. 123 s. *Advanced Design* (3)—Three laboratories. Prerequisites, H. E. 24 s and 21 f.

Advanced study in design, with application to particular problems.  
(McFarland.)

#### Home and Institution Management

H. E. 141 f. *Management of the Home* (3)—Two lectures; one laboratory.

Study and discussion of household organization and management; time and money budgets; house construction and planning; selection, operation, and care of equipment; selection and care of household furnishings, with a view to providing well-being and satisfaction for the members of the family.

H. E. 142 s. *Management of the Home* (3)—Two lectures; one laboratory.

The family, its history; discussion of questions and problems of the family in relation to changing social and economic conditions.

H. E. 143 f. *Practice in Management of the Home* (4).

Experience in operating and managing a household composed of a member of the faculty and a small group of students for approximately one-third of a semester.  
(Murphy.)

H. E. 144 y. *Institution Management* (6)—Three recitations.

The organization and management of food service in hospitals, clubs, schools, cafeterias, and restaurants; management of room service in dormitories; organization of institution laundries.

H. E. 145 f. *Practice in Institution Management* (4)—Prerequisite, H. E. 144 y.

Practice work in one of the following: the University dining hall, a tea room, hospital, cafeteria, or hotel.

H. E. 146 s. *Advanced Institution Management* (3)—Prerequisite, H. E. 144 y. One recitation weekly and individual conferences with the instructor.

Special problems in institution management.

#### Home Economics Extension

H. E. 151 s. *Methods in Home Economics Extension* (3)—Given under the direction of Venia Kellar and specialists.

H. E. 152 f. *Field Practice in Home Economics Extension* (4)—Given under the direction of Venia Kellar, State Home Demonstration Agent. Should be taken during the summer vacation.

#### Home Economics Seminar

H. E. 161 s. *Seminar* (3)—Three recitations.

Book reviews, and abstracts from scientific papers and bulletins relating to home economics, together with criticisms and discussions of the work presented.  
(Murphy and Staff.)

#### HORTICULTURE

PROFESSORS SCHRADER, THURSTON; ASSOCIATE PROFESSORS WENTWORTH, FRAZIER, HAUT, LINCOLN.

##### A. Pomology

HORT. 1 f. *Elementary Pomology* (3)—Three lectures.

A general course in pomology. The proper location and site for an orchard; varieties, planting plans, pollination requirements, inter-crops, spraying, cultural methods, fertilizing methods, thinning, picking, spray residue removal, packing, and marketing are given consideration. These subjects are discussed for apples, peaches, pears, plums, cherries, and quinces. The principles of plant propagation as applied to pomology are also discussed.

HORT. 4 s. *Small Fruit Culture* (2)—Two lectures. Given in alternate years.

The care and management of small fruit plantations. Varieties and their adaptation to Maryland soils and climate, packing, marketing, and a study of the experimental plots and varieties on the Station grounds. The following fruits are discussed: the grape, strawberry, blackberry, blackcap raspberry, red raspberry, currant, gooseberry, dewberry, loganberry, and blueberry. (Not given in 1937-1938.)

HORT. 5 f. *Fruit Judging* (2)—Two laboratories.

A course designed to train students for both practical judging and fruit-judging teams to represent the University of Maryland. Students are required to learn detailed characteristics of commercial varieties of fruit, and are given practice in judging single plates, largest and best collections, boxes, barrels, and commercial exhibits of fruits. Students are required to help set up a horticultural show each year.

HORT. 6 f. *Advanced Fruit Judging* (1)—One laboratory.

HORT. 7 f. *Practical Pomology Laboratory* (2)—Two laboratories. Prerequisite, Hort. 1 f or taken in conjunction with Hort. 1 f. Seasonal practical experience in carrying out orchard and small fruit operations, including spraying, harvesting, spray residue removal, grading, packing, mouse and borer control, pruning, budding, grafting, planting, pollination, etc.

The course will include trips to the principal horticultural regions of Maryland and of neighboring states, and to nurseries or other points of interest.



HORT. 8 s. *Practical Pomology Laboratory* (2)—Two laboratories. Prerequisite, Hort. 1 f.

A continuation of Hort. 7 f as above outlined.

### B. Vegetable Crops

HORT. 11 s. *Principles of Vegetable Culture* (3) — Two lectures; one laboratory.

A study of the fundamental principles underlying all garden practices. The laboratory work is organized from the point of view of the home garden. Special studies are made of vegetable seed identification, methods of growing plants, garden planning, pest control, etc. Each student is given a small garden to fertilize, plant, cultivate, spray, etc.

HORT. 12 f. *Truck Crop Production* (3)—Three lectures. Prerequisite, Hort. 11 s.

A study of methods used in commercial vegetable production. Each crop is discussed in detail. Trips are made to large commercial gardens, various markets, and other places of interest. Given in alternate years. (Not given in 1937-1938.)

### C. Floriculture

HORT. 21 f. *General Floriculture* (2)—One lecture; one laboratory.

The management of greenhouses; the production and marketing of florists' crops; retail methods; plants for house and garden. Given in alternate years. (Not given in 1938-1939.)

HORT. 22 y. *Greenhouse Management* (6)—Two lectures; one laboratory.

A consideration of the methods employed in the management of greenhouses, including the operations of potting, watering, ventilating, fumigation, and methods of propagation. Given in alternate years. (Not given in 1937-1938.)

HORT. 23 y. *Floricultural Practice* (4)—Two laboratories.

Practical experience in the various greenhouse operations of the fall, winter, and spring seasons. Given only occasionally as necessary.

HORT. 24 s. *Greenhouse Construction* (2)—One lecture; one laboratory.

The various types of houses; their location, arrangement, construction, and cost; principles and methods of heating; preparation of plans and specifications for commercial and private ranges. Given in alternate years. (Not given in 1937-1938.)

HORT. 25 y. *Commercial Floriculture* (6)—Two lectures; one laboratory. Prerequisite, Hort. 22 y.

Cultural methods of florists' bench crops and potted plants, the marketing of the cut flowers, the retail store, a study of floral decoration. Given in alternate years. (Not given in 1938-1939.)

HORT. 26 f. *Garden Flowers* (3)—Two lectures; one laboratory. (Not given in 1937-1938.)

Plants for garden use; the various species of annuals, herbaceous perennials, bulbs, bedding plants, and roses and their cultural requirements. Given in alternate years. (Not given in 1937-1938.)

HORT. 27 s. *Floricultural Trip* (1)—Prerequisite, Hort. 22 y.

A trip occupying one week's time will be made through the principal floricultural sections, including Philadelphia and New York, visiting greenhouse establishments, wholesale markets, retail stores, nurseries, etc. The cost of this trip should not exceed thirty dollars to each student. Each student will be required to hand in a detailed report covering the trip. The time for taking this trip will be arranged yearly with each class.

### D. Landscape Gardening

HORT. 31 s. *General Landscape Gardening* (2)—Two lectures.

The theory and general principles of landscape gardening and their application to private and public areas. Special consideration is given to the improvement and beautification of the home grounds, farmsteads, and small suburban properties. Adapted to students not intending to specialize in landscape, but who wish some theoretical and practical knowledge of the subject. Given in alternate years. (Not given in 1938-1939.)

HORT. 32 f. *Elements of Landscape Design* (3)—One lecture; two laboratories. Prerequisite, Hort. 31 s.

A consideration of the principles of landscape design; surveys, mapping, and field work. Given in alternate years. (Not given in 1938-1939.)

HORT. 33 s. *Landscape Design* (3)—Three laboratories. Prerequisite, Hort. 32 f.

The design of private grounds and gardens and of architectural details used in landscape; planting plans; analytical study of plans of practicing landscape architects; field observation of landscape developments. Given in alternate years. (Not given in 1938-1939.)

HORT. 34 f. *Landscape Design* (3)—Three laboratories. Prerequisite, Hort. 33 s.

Continuation of course as outlined above. Given in alternate years. (Not given in 1937-1938.)

HORT. 35 f. *History of Landscape Gardening* (1)—One lecture. Prerequisite, Hort. 31 s.

Evolution and development of landscape gardening; the different styles, and a particular consideration of Italian, English, and American gardens. Given in alternate years. (Not given in 1937-1938.)

HORT. 36 s. *Landscape Construction and Maintenance* (1)—One lecture or laboratory. Prerequisite, Hort. 31 s.

Methods of construction and planting; estimating; park and estate maintenance. Given in alternate years. (Not given in 1937-1938.)



HORT. 37 s. *Civic Art* (2)—One lecture; one laboratory.

Principles of city planning and their application to village and rural improvement, including problems in design of civic center, parks, school grounds, and other public and semi-public areas. Given in alternate years. (Not given in 1938-1939.)

#### E. General Horticulture Courses

HORT. 42 y. *Horticultural Research and Thesis* (4-6).

An advanced student in any of the four divisions of horticulture may select a special problem for investigation. This may be either the summarizing of all the available knowledge on a particular problem or the investigation of some new problem. Where original investigation is carried on, the student should in most cases start the work during the junior year. The results of the research are to be presented in the form of a thesis and filed in the horticultural library.

HORT. 43 y. *Horticultural Seminar* (2).

In this course papers are prepared by members of the class upon subjects pertaining to their research or thesis work or upon special problems assigned them. Discussions of special topics are given from time to time by members of the departmental staff.

#### For Advanced Undergraduates and Graduates

HORT. 101 f. *Commercial Fruit Growing* (3)—Two lectures; one laboratory. Prerequisite, Hort. 1 f.

The proper management of commercial orchards in Maryland. Advanced work is taken up on the subjects of culture, fertilization, pollination, pruning, thinning, spraying, spray removal, picking, packing, marketing, and storage of fruits. Given in alternate years. (Not given in 1938-1939.) (Schrader.)

HORT. 102 s. *Economic Fruits of the World* (2)—Two lectures. Prerequisite, Hort. 1 f.

A study is made of the botanical, ecological, and physiological characteristics of all species of fruit-bearing plants of economic importance, such as the date, pineapple, fig, olive, banana, nut-bearing trees, citrus fruits, and newly introduced fruits, with special reference to their cultural requirements in certain parts of the United States and the insular possessions. All fruits are discussed in this course which have not been discussed in a previous course. Given in alternate years. (Not given in 1938-1939.) (Haut.)

HORT. 103 f. *Tuber and Root Crops* (2)—One lecture; one laboratory. Prerequisite, Hort. 11 s.

A study of white potatoes and sweet potatoes, considering seed, varieties, propagation, soils, fertilizers, planting, cultivation, spraying, harvesting, storing, and marketing. Given in alternate years. (Not given in 1938-1939.) (Frazier.)

HORT. 104 s. *Advanced Truck Crop Production* (2)—Prerequisites, Hort. 11 s and 12 f.

A detailed study of some of the more important problems encountered in the commercial production of truck crops. A thorough study is made of recent literature pertaining to such problems as soil acidity, soil organic matter relationships, new developments in insect and disease control, plant production and transplanting, etc.

HORT. 105 f. *Systematic Olericulture* (3)—Two lectures; one laboratory. Prerequisite, Hort. 11 s.

A study of the classification and nomenclature of vegetable crops and the description and identification of varieties. The adaptation of varieties to different environmental conditions and their special uses in vegetable production. Given in alternate years. (Not given in 1937-1938.)

HORT. 106 y. *Plant Materials* (5)—One lecture; one or two laboratories. A field and laboratory study of trees, shrubs, and vines used in ornamental planting. Given in alternate years. (Thurston.)

HORT. 107 f. *Systematic Pomology* (3)—Two lectures; one laboratory. The history, botany, and classification of fruits and their adaptation to Maryland conditions. Given in alternate years. (Not given in 1937-1938.) (Haut.)

#### For Graduates

HORT. 201 y. *Experimental Pomology* (6)—Three lectures.

A systematic study of the sources of knowledge and opinion as to practice in pomology; methods and difficulties in experimental work in pomology and results of experiments that have been or are being conducted in all experiment stations in this and other countries. (Schrader.)

HORT. 202 y. *Experimental Olericulture* (6)—Three lectures.

A systematic study of the sources of knowledge and opinion as to practice in vegetable growing; methods and difficulties in experimental work in vegetable production and results of experiments that have been or are being conducted in all experiment stations in this and other countries. (Frazier.)

HORT. 204 s. *Methods of Research* (2)—One lecture; one laboratory.

Methods of conducting horticultural research are stressed, to familiarize the student with methods used and the technic involved. Laboratory and field measurements on projects are used to develop technical skill. Outlines of research problems and preparation of research publications are studied, as well as drill in methods of oral presentation of material. (Staff.)

HORT. 205 y. *Advanced Horticultural Research and Thesis* (4, 6, or 8). Students will be required to select problems for original research in pomology, vegetable gardening, floriculture, or landscape gardening. These problems will be continued until completed, and final results are to be published in the form of theses. (Staff.)



**HORT. 206 y. *Advanced Horticultural Seminar* (2).**

This course is required of all graduate students. Students are required to give reports either on special topics assigned them, or on the progress of their work being done in courses. Members of the departmental staff report special research from time to time. (Staff.)

**LATIN**

PROFESSOR W. T. L. TALIAFERRO.

**LAT. 1 y. *Elementary Latin* (6)—Three lectures.**

This course is offered to cover a substantial and accurate course in grammar and syntax, with translation of simple prose. It is substantially the equivalent of one entrance unit in Latin.

**LAT. 2 y. (6)—Three lectures. Prerequisite, Lat. 1 y or one entrance unit in Latin.**

Texts are selected from Virgil, with drill on prosody, and from Cicero.

**LIBRARY SCIENCE**

MISS BARNES, MR. FOGG.

**L. S. 1 f or s. *Library Methods* (1)—Freshman year.**

This course is intended to help students use the library with greater facility. Instruction is given by practical work with the various catalogues, indexes, and reference books. This course considers the general classification of the library according to the Dewey system. Representative works of each division are studied in combination with the use of the library catalogue. Attention is given to periodical literature, particularly that indexed in the Reader's Guide and in other periodical indexes; and to various much-used reference books, which the student will find helpful throughout the college course.

**MATHEMATICS**

PROFESSORS T. H. TALIAFERRO, DANTZIG, GWINNER; ASSOCIATE PROFESSORS SPANN, YATES; ASSISTANT PROFESSOR MARTIN; MR. ALRICH, MR. UMBERGER, MR. VOLCKHAUSEN, MR. LADEN, MISS BARZHE, MRS. MORRIS.

**MATH. 1 Af. *Introductory Algebra* (0)—Three lectures. Open without credit to students of engineering, chemistry, and physics who lack the required preparation for Math. 11 f.**

Fundamental operations; linear and quadratic equations; exponents and logarithms, etc.

**MATH. 7 f. *Solid Geometry* (2)—Two lectures. Prerequisite, plane geometry. College credit given only to students in the College of Education. Open without credit to students desiring to enter the College of Engineering who have had no opportunity to take the subject in high school.**

Lines and planes; cylinders and cones; the sphere; polyhedra.

**MATH. 8 f. *Algebra* (3)—Three lectures. Prerequisite, one year of high school algebra. May be taken by business administration, biology, premedical, and pre dental students who have not the prerequisites for Math. 11 f. Repeated in the second semester.**

Quadratic equations; elementary theory of equations; combinations; permutations and probabilities; the binomial theorem; progressions; logarithms; elementary graphs; etc.

**MATH. 9 f. *Introductory Trigonometry* (1)—One laboratory. Prerequisite to Math. 12 f. Students who have had an equivalent course in high school will have the privilege of entering Math. 12 f.**

**MATH. 10s. *Plane Trigonometry and Analytic Geometry* (3)—Three lectures. Prerequisite, Math. 8 f. May be taken by biology, premedical, and pre dental students who do not take Math. 14 s.**

Trigonometric functions; trigonometric identities; equations and graphs. Principles of plane analytic geometry; the line and the circle; the ellipse, hyperbola and parabola; graphing of functions; empirical equations.

**MATH. 11 f. *College Algebra* (3)—Three lectures. Prerequisite, high school algebra completed. Required of all students in the College of Engineering; of students whose major is mathematics, physics, or chemistry; of students in the College of Education who elect mathematics as their major or minor. Repeated in the second semester.**

Foundations of algebra; binomial and multinomial expansions; progressions; determinants; elements of the theory of numbers; combinatorial analysis and probabilities; quadratic, cubic, and quartic irrationals; complex numbers; theory of equations. Exponential functions and logarithms; elements of trigonometry. Repeated in the second semester.

**MATH. 12 f. *Laboratory in Algebra and Trigonometry* (1)—One laboratory. Required of students whose major is mathematics, or physics, or students in the College of Education who elect mathematics as their major; of all students in the College of Engineering. This course and Math. 11 f may be taken collaterally; if taken separately, the prerequisites are Math. 9 f and 11 f.**

Problems and projects, with special emphasis on the applications of algebra and trigonometry to physics, chemistry, and engineering.

**MATH. 14 s. *Analytic Geometry* (3)—Three lectures. Prerequisite, Math. 11 f. Required of all students in the College of Engineering; of students whose major is mathematics, physics, or chemistry; of students in Education who elect mathematics as their major or minor.**

Trigonometry; Cartesian and polar coördinates; line and circle; curves of the second order; higher algebraic and transcendental curves; periodograms; solid analytics and spherical trigonometry.



MATH. 15 s. *Laboratory in Geometry* (1)—One laboratory. Required of all students whose major is mathematics or physics, and of students in the College of Education who elect mathematics as their major; also of all students in the College of Engineering. This course may be taken collaterally with Math. 1 s; if taken separately, the prerequisites are Math. 12 f and Math. 14 s.

Problems and projects, with special emphasis on the applications of synthetic and analytic geometries to physics, chemistry, and engineering.

MATH. 16 y. *Calculus* (6) — Three lectures. Prerequisite, Math. 14 s. Required of all students in the College of Engineering; of students majoring in mathematics, physics, or chemistry; of students in the College of Education who elect mathematics as their major or minor.

Limits, derivatives, and differentials; maxima and minima; curvature; evolutes; envelopes; elements of curve theory; elementary theory of functions; partial derivatives. Indefinite and definite integrals; multiple integrals; calculation of arcs, areas, volumes, and moments; expansion in series; differential equations with applications to mechanics.

MATH. 17 y. *Laboratory in Calculus* (2)—One laboratory. Required of students whose major is mathematics or physics; of students in Education who elect mathematics as their major; of all students in the College of Engineering. This course and Math. 16 y may be taken collaterally. If taken separately the prerequisites are Math. 15 s and Math. 16 y.

Problems and projects, with special emphasis on the applications of calculus to physics, chemistry, and engineering.

MATH. 18 y. *Geometrical Drawing and Modeling* (2)—One laboratory. Required of students whose major is mathematics and of students in the College of Education with mathematics as their major.

Problems in geometrical construction, in projective geometry, in geometrical optics; mechanical generation of curves.

MATH. 19 y. *Advanced Geometrical Drawing and Modeling* (2) — One laboratory. Prerequisite, Math. 18 y. Required of students whose major is mathematics and of students in the College of Education with mathematics as their major.

Elements of descriptive geometry; projections of skew curves and sections of surfaces; construction of models of space configurations.

#### For Advanced Undergraduates and Graduates

(Courses Math. 101 f, 111 f, 112 s, 114 f, 115 s, and 140 y are taught every year; all other courses are given in alternate years.)

MATH. 101 f. *Mathematical Theory of Investment* (3)—Three lectures. Prerequisite, Math. 11 f or 8 f. Open only to juniors and seniors. Required of all students in Business Administration.

Application of mathematics to financial transactions; compound interest and discount; construction and use of interest tables; sinking funds; annuities; depreciation, valuation, and amortization of securities; building and loan associations; life insurance, etc. (Spann.)

MATH. 111 f. *Elementary Mathematics from an Advanced Standpoint* (2)—Two lectures.

A survey course in high school mathematics intended for workers in biological and social sciences, and for prospective teachers of mathematics and physics. (Dantzig.)

MATH. 112 s. *College Mathematics* (2)—Two lectures. Prerequisite, Math. 111 f or 8 f, or equivalent high school courses.

A survey course of algebra, trigonometry, analytic geometry, and the calculus intended for workers in the biological sciences and for prospective teachers of mathematics and physics. (Dantzig.)

MATH. 114 f. *Differential Equations for Engineers* (3)—Three lectures.

This course is conducted in close coöperation with the College of Engineering, and deals with aspects of mathematics which arise in engineering theory and practice. Among the topics treated are the following: linear differential equations; advanced methods in kinematics and dynamics; applications of analysis to electrical circuits, aero-dynamics, bridge-design, etc. (Martin, Yates.)

MATH. 115 s. *Applied Calculus for Chemists* (3)—Three lectures.

Prerequisite, Math. 16 y. Required of students in Industrial Chemistry. Elective for others.

This course is conducted in close coöperation with the Chemistry Department, and deals with the aspects of mathematics which arise in the theory and practice of chemistry. Among the topics treated are the following: partial and total derivatives; applications of mathematical analysis to thermo-dynamics, to molecular and atomic phenomena, and to physical chemistry. (Alrich.)

MATH. 121 s. *Fundamental Concepts of Mathematics* (2)—Two lectures.

Foundations of arithmetic, algebra, geometry, and analysis. The evolution of such concepts as number, limit, continuity, and infinity; the axioms of geometry; spatial forms and measurement; the concepts of space, time, and matter, leading up to the theory of relativity. (Not given in 1937-1938.) (Martin.)

MATH. 122 s. *History of Mathematics* (2)—Two lectures.

History of arithmetic, algebra, geometry, the calculus, and the theory of functions; from the period of classical Greece to modern times. (Dantzig.)

MATH. 123 f. *Theory of Equations* (2)—Two lectures. Prerequisite, Math. 16 y.

Symmetric functions; elimination; the fundamental theorem of algebra; algebraic solution of equations; the Galois theory; asymptotic solutions of equations. (Taliaferro.)



MATH. 124 s. *Theory of Numbers* (2)—Two lectures. Prerequisite, Math. 16 y.

Linear congruences, continued fractions and diophantine equations; criteria of primality; quadratic residues; higher congruences; the Problem of Fermat. (Dantzig.)

MATH. 125 f. *Plane Curves* (2)—Two lectures. Prerequisite, Math. 16 y.

Infinitesimal properties of plane curves; contact and osculation; asymptotes and singular points; algebraic curves; polarity; the Plucker characters of a curve; cubic and quartic curves. (Not given in 1937-1938.) (Alrich.)

MATH. 126 s. *Analytic Geometry in Space* (2)—Two lectures. Prerequisite, Math. 16 y.

Point, plane, and line; line geometry; quadratic surfaces; twisted cubics; algebraic curves and surfaces; many-dimensional geometry. (Taliaferro.)

MATH. 127 f. *Advanced Topics in Calculus* (2)—Two lectures. Prerequisite, Math. 16 y.

Evaluation of definite integrals; expansion into series; line and surface integrals; the theorems of Green and Stokes; differential equations, existence theorems. (Not given in 1937-1938.) (Martin.)

MATH. 128 s. *Advanced Differential Equations* (2)—Two lectures. Prerequisite, Math. 16 y.

Existence theorems; integration in series; asymptotic solutions; general theory of linear equations; ordinary differential equations of the second order; singular solutions; elements of partial differential equations. (Not given in 1937-1938.) (Martin.)

MATH. 129 f. *Non-Euclidean Geometry* (2)—Two lectures. Prerequisite, Math. 16 y.

Evolution of geometrical ideas; the axioms of geometry; theory of parallels; projective approach to geometrics of Lobachevsky and Riemann; the Cayley-Klein theory; the problem of space and the theory of relativity. (Not given in 1937-1938.) (Dantzig.)

MATH. 130 f. *Modern Algebra* (2)—Two lectures. Prerequisite, Math. 16 y.

Sets, groups, and extension of groups; polynomials; rings and fields; general theory of ideals; polynomial ideals; elements of algebraic geometry. (Yates.)

MATH. 131 s. *Analytical Mechanics* (2)—Two lectures. Prerequisite, Math. 16 y and Math. 126 s.

Kinematics; the dynamics of a particle; statics; the principle of D'Alembert; the dynamics of a system; the equations of Lagrange and Jacoby; the principle of Hamilton. (Yates.)

MATH. 132 f. *Theory of Probabilities* (2)—Two lectures. Prerequisite, Math. 16 y.

Frequency and probability; the concept of "equally likely"; combinatorial analysis; addition and multiplication theorems; frequency of distribution; continuous probabilities; applications to statistics, to theories of errors and correlations, and to molecular theories. (Dantzig.)

MATH. 133 y. *Famous Mathematical Problems* (2)—One lecture. Prerequisites, Math. 16 y and 17 y. Open only to students with outstanding records in mathematical studies.

Prime numbers; the problem of Fermat; trisection of angles; regular polygons and kindred problems; squaring the circle; transcendentalism of pi and e; famous integrals; maxima and minima; probability problems; the three-body problem. (Not given in 1937-1938.) (Dantzig.)

MATH. 134 f. *Higher Algebra* (2)—Two lectures. Prerequisites, Math. 16 y and Math. 17 y.

Determinants; theory of elimination; inequalities; continued fractions; combinatorial analysis; algebraic solution of equations; expansions and summations. Special emphasis will be laid on topics required for actuarial examinations. (Martin.)

MATH. 135 s. *College Geometry* (2)—Two lectures. Prerequisites, Math. 15 s and Math. 18 y.

Geometry of the triangle; systems of circles; ruler-compass construction; linkages; rollers and roulettes projection; general theory of conics; properties of plane cubics and quartics; twisted cubics. (Yates.)

MATH. 140 y. *Undergraduate Seminar* (2)—One session.

Required of students who major in mathematics. This course is intended as a clearing house of problems which arise in the undergraduate courses in mathematics. (Dantzig, Yates, Alrich, Martin.)

### For Graduates

(With the exception of the Graduate Seminar, Math. 240 y, all the courses listed below are taught in alternate years.)

MATH. 221 f. *Theory of Functions of a Complex Variable* (2)—Two lectures. Prerequisite, Math. 127 f.

Cauchy-Riemann conditions; power series and infinite products; conformal mapping; the Cauchy integral theory; residues and periods; uniform functions; analytical continuation. (Martin.)

MATH. 222 s. *Theory of Functions of a Real Variable* (2)—Two lectures. Prerequisites, Math. 16 y and Math. 121 s.

Logical development of the concept of number; aggregates, point-sets; convergence, limit; continuous and discontinuous functions; differentiation and generalized integration. (Martin.)



MATH. 223 s. *Vectors and Matrices* (2)—Two lectures. Prerequisite, Math. 123 f.

Scalars, vectors, matrices, and determinants; transformations; linear dependence; canonical forms; elementary divisors; applications to geometry and quantum theory. (Dantzig.)

MATH. 224 f. *Algebraic Geometry* (2)—Two lectures. Prerequisites, Math. 16 y and Math. 125 f.

Bi-rational transformations; invariants of algebraic curves and surfaces; residuation; genus. (Alrich.)

MATH. 225 f. *Projective Geometry* (2)—Two lectures. Prerequisites, Math. 125 f and Math. 126 s.

The postulates of geometry; metric and descriptive properties; the principle of duality; the group of collineations; projective equivalence; projective theory of curves; projective differential geometry; non-Euclidean geometry. (Dantzig.)

MATH. 226 s. *Infinitesimal Geometry* (2)—Two lectures. Prerequisites, Math. 16 y, Math. 125 f, and Math. 126 s.

Principles of vector analysis; skew curves and surfaces; curvature, asymptotic lines and geodesics; triple orthogonal systems; the problem of space structure. (Not given in 1937-1938.) Dantzig.)

MATH. 227 f. *Infinite Processes* (2)—Two lectures. Prerequisites, Math. 127 f. and Math. 128 s.

Criteria of convergence for series and products; continued fractions; trigonometric series; series of polynomials; orthogonal functions; functions defined by power series. (Not given in 1937-1938.) (Martin.)

MATH. 228 f. *Elliptic Functions* (2)—Two lectures. Prerequisite, Math. 221 f.

The theories of Legendre and Jacoby; the Weierstrass theory; doubly periodic functions; elliptic integrals; applications to algebra, geometry, and mechanics. (Yates.)

MATH. 229 f. *Calculus of Variations* (2)—Two lectures. Prerequisite, Math. 127 f. and Math. 128 s.

Classical problems; the conditions of Euler; the Weierstrass theory; strong and weak minima; case of extremals with variable endpoints; extension to multiple integrals. (Martin.)

MATH. 230 s. *Continuous Groups of Transformations* (2)—Two lectures. Prerequisites, Math. 126 s and Math. 223 s.

Correspondence; transformation; semi-groups and groups; invariants; the Lie theory of groups; infinitesimal transformations; contact transformations; applications to differential equations and to geometry. (Dantzig.)

MATH. 231 s. *Partial Differential Equations with Applications to Mathematical Physics* (2)—Two lectures. Prerequisites, Math. 127 f and Math. 128 s.

Partial differential equations of the first and second order; linear equations; total differential equations; equations of the Monge-Ampere type; the Laplace equation; harmonics; applications to electricity, heat, elasticity, and hydrodynamics; potential theory. (Not given in 1937-1938.) (Yates.)

MATH. 232 s. *The Theory of Relativity* (2)—Two lectures. Prerequisites, Math. 226 s and Math. 131 f.

History of the problem of relativity; the Maxwell equations; special theory of relativity; elements of tensor analysis; the general theory of relativity. (Dantzig.)

MATH. 233 s. *Analytical Dynamics* (2)—Two lectures. Prerequisites, Math. 131 s and Math. 221 f.

Classical problems in celestial mechanics; the potential; stability of orbits; the restricted problem of three bodies. Textbook: Whittaker, *Analytical Dynamics*. (Martin.)

MATH. 240 y. *Graduate Seminar* (2)—One session.

Required of all graduate students. Intended as a clearing house of problems arising in the graduate courses. Reports on progress on dissertations and a critical discussion of results achieved.

(Dantzig, Yates, Martin.)

## MILITARY SCIENCE AND TACTICS

PROFESSOR OF MILITARY SCIENCE AND TACTICS, LIEUTENANT COLONEL JOSEPH

D. PATCH, U. S. A.; ASSISTANT PROFESSORS MAJOR CHARLES H.

JONES, MAJOR HOWARD CLARK, 2D, \*MAJOR FRANK WARD,

†CAPTAIN WILLIAM H. MAGLIN; WARRANT OFFICER

WILLIAM H. MCMANUS; SERGEANT GEORGE J. UHRINAK.

### \*\*BASIC COURSE

*Freshman Year*—1 lecture; 2 drill periods.

M. I. 1 y. *Basic R. O. T. C.* (2).

The following subjects are covered:

#### First Semester

National Defense Act, including basic organization and the R. O. T. C.; military courtesy, command and leadership; military hygiene and first aid; marksmanship.

\* Leaving, June, 1937.

† Arriving, August, 1937.

\*\* Required of qualified students.



### Second Semester

Physical drill, command and leadership, automatic rifle; military history and policy; military hygiene and first aid; citizenship; international situation.

*Sophomore Year*—1 lecture; 2 drill periods.

M. I. 2 y. *Basic R. O. T. C.* (4).

The following subjects are covered:

### First Semester

Scouting and patrolling, mapreading, military history, leadership.

### Second Semester

Military history, musketry, combat principles of the squad and section, leadership.

### \*\*ADVANCED COURSE

*Junior Year*—3 lectures; 2 drill periods.

M. I. 101 y. *Advanced R. O. T. C.* (6).

The following subjects are covered:

### First Semester

Aerial photograph reading, machine guns, howitzer weapons, combat principles, leadership.

### Second Semester

Combat principles of rifle, machine gun, and howitzer platoons, pistol marksmanship, review of rifle marksmanship, leadership.

*Senior Year*—3 lectures; 2 drill periods.

M. I. 102 y. *Advanced R. O. T. C.* (6).

The following subjects are covered:

### First Semester

Combat principles (including organization of larger combat units), command and leadership, weapons (tanks), chemical agents and uses, mechanization.

### Second Semester

Company administration, military history and policy, military law, Officers' Reserve Corps regulations.

\*\* Elective for qualified students.

### MODERN LANGUAGES

PROFESSOR FALLS; ASSOCIATE PROFESSOR KRAMER; ASSISTANT PROFESSORS DARBY, PRAHL; MISS WILCOX, MR. SCHWEIZER, MR. LIOTARD, MR. EVANGELIST, MR. SIMONPIETRI, MISS GOODNER.

All students whose major is in Modern Languages are required to take *Introduction to Comparative Literature* (Comp. Lit. 101 f and 102 s) and a *Conference Course in Reading* (French, German, Spanish 120). The following courses are recommended: *General European History* (H. 1 y), *Introduction to Philosophy* (Phil. 1 f or 1 s), *The Old Testament as Literature* (Comp. Lit. 104 f), *Prose and Poetry of the Romantic Age* (Eng. 113 f and 114 s), *Romanticism in France and Germany* (Comp. Lit. 105 f and 106 s). For a major in German, *Anglo-Saxon* (Eng. 103 y).

Specific requirements for the majors in the different languages are as follows: French—French 9 y, 10 y, 15 y, 120, and two additional year-courses in literature in the 100 group; German—10 y, 15 y, 120, and two additional year-courses in the 100 group; Spanish—Spanish 6 y, 15 y, 120, and two additional year-courses in the 100 group.

### A. French

FRENCH 1 y. *Elementary French* (6)—Three lectures. Students who offer two units in French for entrance, but whose preparation is not adequate for second-year French, receive half credit for this course.

Elements of grammar; composition; pronunciation and translation.

FRENCH 2 s. *Elementary Conversation* (1)—One lecture. Prerequisite, the grade of A or B in the first semester of French 1 y. Students who are interested in French, and who have done well in the first semester of the elementary year-course, should take this course in conjunction with the second semester of French 1 y.

FRENCH 3 y. *Second-Year French* (6)—Three lectures. Prerequisite, French 1 y or equivalent.

Study of grammar continued; composition; conversation; translation of narrative and technical prose. In the organization of classes, certain sections are set aside for the reading of scientific French texts.

FRENCH 4 f. *Grammar Review* (2)—Two lectures. Designed particularly for students who enter with three or more units in French, who expect to do advanced work in the French language or literature, but who are not prepared to take French 10 y. Properly qualified students may elect this course at the same time as French 6 y, 7 y, 8 y, 15 y.

FRENCH 5 s. *Intermediate Conversation* (2)—Two lectures. Prerequisite, the grade of A or B in the first semester of French 3 y. Students who expect to take advanced work in French literature, and who have com-



pleted the first semester of French 3 y with the grade of A or B, should take this course in conjunction with the second semester of French 3 y.

Practical exercises in conversation; discussion in French of simple texts in prose and verse.

FRENCH 6 y. *The Development of the French Novel* (6)—Three lectures.

Introductory study of the history and growth of the novel in French literature; of the lives, works, and influence of important novelists. Reports. (Not given in 1937-1938.)

FRENCH 7 y. *The Development of the French Drama* (6)—Three lectures.

Introductory study of the French drama of the seventeenth, eighteenth, and nineteenth centuries. Translation and collateral reading. Reports. (Not given in 1937-1938.)

FRENCH 8 y. *The Development of the Short Story in French* (6)—Three lectures.

A study of the short story in French literature; reading and translation of representative examples.

FRENCH 9 y. *French Phonetics* (2)—One lecture. Prerequisite, French 1 y.

FRENCH 10 y. *Intermediate Grammar and Composition* (6)—Three lectures. Prerequisite, French 3 y.

(French 9 y and 10 y are required of students preparing to teach French.)

FRENCH 15 y. *Introduction to French Literature* (6)—Three lectures. Prerequisite, French 3 y.

An elementary survey introducing the student to the chief authors and movements in French literature. This course is given in French.

#### For Advanced Undergraduates and Graduates

A more intensive survey of modern French literature is offered by means of rotating courses roughly divided by centuries.

FRENCH 102 y. *French Literature of the 17th Century* (4)—Two lectures. (Not given in 1937-1938.) (Wilcox.)

FRENCH 103 y. *French Literature of the 18th Century* (4)—Two lectures. (Falls.)

FRENCH 104 y. *French Literature of the 19th Century* (4)—Two lectures. (Wilcox.)

FRENCH 105 y. *French Literature of the 20th Century* (4)—Two lectures. (Not given in 1937-1938.) (Falls.)

FRENCH 110 y. *Advanced Composition* (6)—Three lectures. Prerequisite, French 10 y.

(This course is required of students preparing to teach French.) (Falls.)

FRENCH 120. *Conference Course in Reading* (credits allowed: majors, 4 semester hours; minors, 2 semester hours.)

A two-year course open to majors and minors in French. It proposes: (1) to fix the attention of the student upon his field of concentration as a whole rather than upon the detailed knowledge of the subject-matter of such courses as he has taken in the field; (2) to develop in the student the ability to read independently. Conferences with qualified members of the department take the place of formal lectures. This course prepares majors and minors in French for the comprehensive examination in modern French literature at the end of the senior year.

#### For Graduates

FRENCH 201 y. *Research* (2-4)—Credits determined by work accomplished. (Staff.)

FRENCH 202 y. *Diderot and the Encyclopaedists* (4)—Two lectures. (Not given in 1937-1938.) (Falls.)

FRENCH 203 y. *Aspects and Conceptions of Nature in French Literature of the 18th Century* (4)—Two lectures. (Not given in 1937-1938.) (Falls.)

FRENCH 204 y. *Georges Duhamel, Poet, Dramatist, Novelist* (4)—Two lectures. (Falls.)

FRENCH 205 y. *French Literature of the Middle Ages and the Renaissance* (4)—Two lectures. (Not given in 1937-1938.) (Darby.)

FRENCH 210 y. *Seminar* (2-4)—One meeting weekly. (Required of all graduate students in French.)

Attention is also called to Comparative Literature 105 f, *Romanticism in France*.

#### B. German

GERMAN 1 y. *Elementary German* (6)—Three lectures. Students who offer two units in German for entrance, but whose preparation is not adequate for second-year German, receive half credit for this course.

Elements of grammar; composition; pronunciation and translation.

GERMAN 2 s. *Elementary Conversation* (1)—One lecture. Prerequisite, the grade of A or B in the first semester of German 1 y. Students who are interested in German, and who have done well in the first semester of the elementary year-course, should take this course in conjunction with the second semester of German 1 y.



GERMAN 3 y. *Second-Year German* (6)—Three lectures. Prerequisite, German 1 y or equivalent.

Reading of narrative and technical prose, grammar review and oral and written practice. In the organization of classes, certain sections are set aside for the reading of scientific German texts.

GERMAN 4 f. *Grammar Review* (2)—Two lectures. Designed particularly for students who enter with three or more units in German and who expect to do advanced work in the German language or literature, but who are not prepared to take German 10 y. Properly qualified students may elect this course at the same time as German 6 f or 8 f.

GERMAN 5 s. *Intermediate Conversation* (2)—Two lectures. Prerequisite, the grade of A or B in the first semester of German 3 y. Students who expect to take advanced work in German literature, and who have completed the first semester of German 3 y with the grade of A or B, should take this course in conjunction with the second semester of German 3 y.

Practical exercises in conversation; discussion in German of simple texts in prose and verse.

GERMAN 6 f. *Advanced German* (3)—Three lectures. Prerequisite, German 3 y or equivalent.

Rapid reading of novels and short stories from recent German literature. (Not given in 1937-1938.)

GERMAN 7 s. *Advanced German* (3)—Three lectures.

Continuation of German 6 f. (Not given in 1937-1938.)

GERMAN 8 f. *Advanced German* (3)—Three lectures. Prerequisite, German 3 y or equivalent.

Rapid reading of dramas from recent German literature. This course alternates with German 6 f. (Not given in 1937-1938.)

GERMAN 9 s. *Advanced German* (3)—Three lectures.

Continuation of German 8 f. (Not given in 1937-1938.)

GERMAN 10 y. *German Grammar and Composition* (4)—Two lectures. Prerequisite, German 3 y.

(This course is required of students preparing to teach German.)

GERMAN 15 y. *Introduction to German Literature* (6)—Three lectures. Prerequisite, German 3 y or equivalent.

An elementary survey of the history of German literature; a study of representative authors and works.

#### For Advanced Undergraduates and Graduates

GERMAN 101 f. *German Literature of the 18th Century* (3)—Three lectures.

The earlier classical literature. (Not given in 1937-1938.) (Prah.)

GERMAN 102 s. *German Literature of the 18th Century* (3)—Three lectures.

The later classical literature. (Not given in 1937-1938.) (Prah.)

GERMAN 103 f. *German Literature of the 19th Century* (3)—Three lectures.

Romanticism and Young Germany. (Not given in 1937-1938.) (Prah.)

GERMAN 104 s. *German Literature of the 19th Century* (3)—Three lectures.

The literature of the Empire. (Not given in 1937-1938.) (Prah.)

GERMAN 105 f. *Contemporary German Literature* (3)—Three lectures.

A study of the lives, works, and influence of outstanding authors of the present. (Prah.)

GERMAN 106 s. *Contemporary German Literature* (3)—Three lectures.

Continuation of German 105 f. (Prah.)

GERMAN 120. *Conference Course in Reading* (credits allowed: majors, 4 semester hours; minors, 2 semester hours).

A two-year course open to majors and minors in German. It proposes: (1) to fix the attention of the student upon his field of concentration as a whole rather than upon the detailed knowledge of the subject-matter of such courses as he has taken in the field; (2) to develop in the student the ability to read independently. Conferences with qualified members of the department take the place of formal lectures. This course prepares majors and minors in German for the comprehensive examination in modern German literature at the end of the senior year.

#### For Graduates

GERMAN 201 y. *Research* (2-4)—Credits determined by work accomplished. (Staff.)

GERMAN 202 y. *The Modern German Drama* (4)—Two lectures.

Study of the naturalistic, neo-romantic, and expressionistic drama against the background of Ibsen and other international figures. (Not given in 1937-1938.) (Prah.)

GERMAN 203 y. *Schiller* (4)—Two lectures.

Study of the life and works of Schiller, with emphasis on the history of his dramas. (Prah.)

GERMAN 210 y. *Seminar* (2-4)—One meeting weekly.

(Required of all graduate students in German.)

Attention is also called to Comparative Literature 106 s, *Romanticism in Germany*, and Comparative Literature 107 f, *The Faust Legend in English and German Literature*.



### C. Italian

ITALIAN 1 y. *Elementary Italian* (6)—Three lectures. Recommended particularly for advanced students in French and Spanish. Not open to freshmen and sophomores. (Not to be counted in fulfillment of the general language requirements.)

Drill in pronunciation and in the elements of the language. Reading of short stories from modern authors.

### D. Spanish

SPANISH 1 y. *Elementary Spanish* (6)—Three lectures. Students who offer two units in Spanish for entrance, but whose preparation is not adequate for second-year Spanish, receive half credit for this course.

Elements of grammar; composition; pronunciation and translation.

SPANISH 2 s. *Elementary Conversation* (1)—One lecture. Prerequisite, the grade of A or B in the first semester of Spanish 1 y. Students who are interested in Spanish, and who have done well in the first semester of the elementary year-course, should take this course in conjunction with the second semester of Spanish 1 y.

SPANISH 3 y. *Second-Year Spanish* (6)—Three lectures. Prerequisite, Spanish 1 y or equivalent.

Reading of narrative works and plays; grammar review; oral and written practice.

SPANISH 4 f. *Grammar Review* (2)—Two lectures. Designed particularly for students who enter with three or more units in Spanish, who expect to do advanced work in the Spanish language or literature, but who are not prepared to take Spanish 6 y. Properly qualified students may elect this course at the same time as Spanish 15 y.

SPANISH 5 s. *Intermediate Conversation* (2)—Two lectures. Prerequisite, the grade of A or B in the first semester of Spanish 3 y. Students who expect to take advanced work in Spanish literature, and who have completed the first semester of Spanish 3 y with the grade of A or B, should take this course in conjunction with the second semester of Spanish 3 y.

Practical exercises in conversation; discussion in Spanish of simple texts in prose and verse.

SPANISH 6 y. *Advanced Composition and Conversation* (4)—Two lectures. Prerequisite, Spanish 3 y or equivalent.

Introduction to phonetics; oral and written composition.

(This course is required of students preparing to teach Spanish.)

SPANISH 15 y. *Introduction to Spanish Literature* (6)—Three lectures. An elementary survey introducing the student to the chief authors and movements in Spanish literature. This course is given in Spanish.

### For Advanced Undergraduates and Graduates

SPANISH 103 f. *The Spanish Drama* (3)—Three lectures.

The drama of the Golden Age. (Not given in 1937-1938.) (Darby.)

SPANISH 104 s. *The Spanish Drama* (3)—Three lectures.

Continuation of Spanish 103 f. The drama since Calderon. (Not given in 1937-1938.) (Darby.)

SPANISH 105 y. *Cervantes* (6)—Three lectures.

The life and times of Cervantes; principal prose works. (Not given in 1937-1938.) (Darby.)

SPANISH 107 f. *The Spanish Novel* (3)—Three lectures.

Classic novels and short stories of the Golden Age and of the eighteenth century. (Darby.)

SPANISH 108 s. *The Spanish Novel* (3)—Three lectures.

Continuation of Spanish 107 f. A study of the development of the modern novel. (Darby.)

SPANISH 120. *Conference Course in Reading* (credits allowed: majors, 4 semester hours; minors, 2 semester hours).

A two-year course open to majors and minors in Spanish. It proposes: (1) to fix the attention of the student upon his field of concentration as a whole rather than upon the detailed knowledge of the subject-matter of such courses as he has taken in the field; (2) to develop in the student the ability to read independently. Conferences with qualified members of the department take the place of formal lectures. This course prepares majors and minors in Spanish for the comprehensive examination in modern Spanish literature at the end of the senior year.

### For Graduates

SPANISH 201 y. *Research* (2-4)—Credits determined by work accomplished. (Staff.)

SPANISH 202 y. *The Golden Age in Spanish Literature* (6)—Three lectures.

Detailed study of the classical authors. (Darby.)

SPANISH 203 f. *Spanish Poetry* (3)—Three lectures.

The epic, the ballad and popular poetry, early lyrics, poetry of the Golden Age. (Not given in 1937-1938.) (Darby.)

SPANISH 204 s. *Spanish Poetry* (3)—Three lectures.

Continuation of Spanish 203 f. Poetry of the 18th, 19th, and 20th centuries. (Not given in 1937-1938.) (Darby.)

SPANISH 210 y. *Seminar* (2-4)—One meeting weekly.

(Required of all graduate students in Spanish.)



## MUSIC

MR. RANDALL, MRS. BLAISDELL.

MUSIC 1 y. *Music Appreciation* (2)—One lecture.

A study of all types of classical music with a view to developing the ability to listen and enjoy. Lecture recitals will be presented with the aid of performers and records. A study of the orchestra and the instruments that it employs. A study of musical form. The development of the opera and oratorio. Great singers of the past and present. Well-known musicians occasionally appear as guest lecturers and performers.

MUSIC 2 y. *History of Music* (2)—One lecture.

A comprehensive course in the history of music covering the development of all forms of music from ancient times through the renaissance; the classic and the romantic schools; and the more modern composers.

MUSIC 3 y. *University Chorus* (1).

This course is offered for those interested in part-singing. After voice trials, students who have ability to read and sing music of the grade of easy songs are admitted. Members of the Women's Chorus and the Men's Glee Club indicated hereafter are combined at times for mixed chorus singing.

(a) Women's University Chorus. Study of part-singing for women's voices. Credit is awarded for each year's regular attendance at weekly rehearsals and participation in public performances of the chorus.

(b) Men's Glee Club. Study of part-singing for men's voices. Credit is awarded for each year's regular attendance at weekly rehearsals and participation in public performances of the Glee Club.

MUSIC 4 y. *University Orchestra* (1).

The purpose of the University Orchestra is study of the classics. Works of the standard symphonists from Haydn and Mozart to Wagner and the modern composers are used. Students who play orchestral instruments are eligible for membership. At least one rehearsal of two hours duration is held each week, and all players are expected to take part in public performances.

MUSIC 5 y. *Harmony* (4)—Two lectures.

This course includes a study of major and minor scales, intervals, harmonic progressions, primary and secondary triads in root position and first and second inversions, the dominant seventh chord in its root position and inversions.

The above theory is taught to give the student a basis for ear training, dictation, melody writing, and melody harmonization.

## PHILOSOPHY

PROFESSOR MARTI.

PHIL. 1 f or s. *Introduction to Philosophy* (3)—Three lectures.

Not open to freshmen.

A study of the development of philosophical thought from the early Greeks to the modern era.

PHIL. 11 s. *Modern European Philosophy* (3)—Three lectures. Prerequisite, Phil. 1 f or s.

A continuation of Phil. 1 f or s. Alternates with Phil. 12 s. (Not given in 1937-1938.)

PHIL. 12 s. *American Philosophy* (3)—Three lectures. Prerequisite, Phil. 1 f or s.

A continuation of Phil. 1 f or s. Alternates with Phil. 11 s.

PHIL. 21 f. *Aesthetics* (3)—Three lectures. Prerequisite, Phil. 1 f or s, and prerequisite or, by special permission, corequisite: Art 1 f or s, or Music 1 y or 2 y, or a 100 course in literature.

An historical and systematic introduction to the philosophy of art. Alternates with Phil. 22 f and 23 f. (Not given in 1937-1938.)

PHIL. 22 f. *Logic* (3)—Three lectures. Prerequisite, Phil 1 f or s, and satisfactory preparation in mathematics or science.

An introductory course, designed especially for science majors. Alternates with Phil. 21 f and 23 f. (Not given in 1937-1938.)

PHIL. 23 f. *Ethics* (3)—Three lectures. Prerequisite, Phil. 1 f or s.

A study of the implications of problems of the good life. Alternates with Phil. 21 f and 22 f.

PHIL. 31 f. *Readings in Philosophy* (1)—One hour of discussion. Prerequisite, Phil. 1 f or s.

One or several relatively easy philosophical works will be read, and discussed in class. The topic will be changed, from semester to semester, although the same work may be studied again, after three or four semesters. Not more than two credits allowed to any one student. (Not given in 1937-1938.)

PHIL. 32 s. *Readings in Philosophy* (1)—One hour of discussion. Prerequisite, Phil. 1 f or s. Similar to Phil. 31 f. Phil. 31 f not a prerequisite. (Not given in 1937-1938.)

PHIL. 33 f. *Readings in Philosophy* (1)—One hour of discussion. Prerequisite, Phil. 1 f or s.

PHIL. 34 s. *Readings in Philosophy* (1)—One hour of discussion. Prerequisite, Phil. 1 f or s.



### For Advanced Undergraduates and Graduates

PHIL. 101 f. *Systems of Philosophy* (3)—Three hours of lectures, student reports, and discussion. Prerequisite, two courses in philosophy, and the permission of the professor.

The system of one philosopher, or the development of one movement, will be studied throughout the semester. The topic will be changed, from semester to semester, although, after three or four semesters, the same system may be chosen again. Not more than nine credits allowed to any one student. (Not given in 1937-1938.) (Marti.)

PHIL. 102 s. *Systems of Philosophy* (3)—Three hours of lectures, student reports, and discussion. Prerequisite, two courses in philosophy, and the permission of the professor.

Continuation of Phil. 101 f. (Not given in 1937-1938.) (Marti.)

PHIL. 103 f. *Systems of Philosophy: F. W. J. SCHELLING* (3)—Three hours of lectures, student reports, and discussion. Prerequisite, two courses in philosophy, and the permission of the professor.

Similar to Phil. 101 f. (Marti.)

PHIL. 104 s. *Systems of Philosophy: CHARLES S. PEIRCE* (3)—Three hours of lectures, student reports, and discussion. Prerequisite, two courses in philosophy, and the permission of the professor.

Similar to Phil. 101 f. (Marti.)

### PHYSICS

PROFESSOR EICHLIN; DR. DICKINSON, MR. CLARK.

PHYS. 1 y. *General Physics* (8)—Three lectures; one laboratory. Required of students in the Premedical curriculum. This course satisfies the minimum requirement for a science major. Prerequisites, Math. 11 f and 14 s, or Math. 8 f and Math. 10 s.

A study of the physical phenomena in mechanics, heat, sound, magnetism, electricity, and light.

PHYS. 2 y. *General Physics* (10)—Four lectures; one laboratory. Required of all students in the Engineering curricula and of those with chemistry, mathematics, and physics majors. Elective for other students. Prerequisites, Math. 11 f, Math. 14 s, and Math. 16 y. The latter may be taken concurrently.

A study of mechanics, heat, sound, magnetism, electricity, and light.

PHYS. 3 y. *Elementary Physics* (6)—Three lectures. This introductory course is designed to meet the need of students who desire to become acquainted with the fundamental principles of physics. Instruction will be given by lectures, recitations, and experimental demonstrations. This course, with such additional work as may be deemed necessary by the Department, will be accepted as the equivalent of Phys. 1 y.

### For Advanced Undergraduates and Graduates

PHYS. 101 f. *Precision of Measurements* (3)—Three lectures. Prerequisites, Phys. 1 y or 2 y, and Math. 16 y.

A discussion of the principles underlying the treatment of experimental data, as to precision of observations, errors, interpolation, curve analysis, etc., with emphasis on the planning of investigations involving measurements. The course is intended as an introduction to quantitative experimental work. (Eichlin.)

PHYS. 102 s. *Quantitative Physical Measurements* (3)—Two lectures; one laboratory. Prerequisite, Phys. 101 f.

This course, supplementing Phys. 101 f, is designed to familiarize the student with the manipulation of various types of apparatus used in experimentation in physical problems, and the adaptation and analysis of data so obtained. (Eichlin.)

PHYS. 103 y. *Advanced Physics* (6) — Three lectures. Prerequisite, Phys. 1 y.

This course, supplementing Phys. 1 y, is an advanced study of physical phenomena in optics, spectroscopy, conduction of electricity through gases, photoelectricity, etc., with a comprehensive review of basic principles involved. It is intended to familiarize the student in a general survey with some of the recent developments in physics. (Dickinson.)

PHYS. 104 y. *Advanced Experiments* (6)—One lecture; two laboratories. Prerequisite, Phys. 103 y.

This course, supplementing Phys. 1 y, is intended to provide the student with experience in experimental physics. (Dickinson.)

PHYS. 105 f. *Heat and Thermodynamics* (3)—Two lectures; one laboratory. Prerequisite, Phys. 2 y.

The classical phenomena of heat and radiation phenomena are developed on the basis of the kinetic molecular theory and the quantum theory. The first and second laws of thermodynamics are applied to physical processes. (Dickinson.)

PHYS. 106 s. *Theoretical Mechanics* (3)—Three lectures. Prerequisite, Phys. 2 y.

An analytical treatment of the fundamental principles of kinematics and dynamics is presented, with problems and laboratory exercises to illustrate these principles. The use of generalized coördinates is illustrated. The equations of La Grange are applied to selected topics in the field of dynamics. (Dickinson.)

PHYS. 107 f. *Optics* (3)—Two lectures; one laboratory. Prerequisite, Phys. 2 y.

A study is made of selected topics in the refraction, reflection, interference, diffraction, and polarization of light. The principles are employed on a detailed study of optical systems of telescope, microscope, spectroscope, and interferometer. (Dickinson.)



PHYS. 108 s. *Electricity and Magnetism* (3)—Two lectures; one laboratory. Prerequisite, Phys. 2 y.

A study is made of elementary and mathematical theory of electrostatics, magnetostatics, magnetism, electrical currents, etc.

An experimental study of electrical instruments and their use in physical measurements is included. (Dickinson.)

PHYS. 109 y. *Electric Discharge* (6)—Two lectures; one laboratory. Prerequisites, at least two courses of the 105 f-108 s group.

The discrete nature of matter, electricity, and radiation is emphasized from an empirical point of view. The determination of the fundamental electronic and molecular constants is treated in detail. The process of electrical discharge through gas and vacuum is ramified to include discussion of radioactivity, photoelectricity, thermionics, and atomic structure. (Not given in 1937-1938.) (Dickinson.)

#### Graduates

PHYS. 201 f. *Atomic Structure* (3)—Three lectures.

Development of theories on the structure of the atom through discussion of optical and X-ray spectra, atomic models as applied to the periodic table, and related topics. (Eichlin.)

PHYS. 202 s. *Advanced Spectroscopy* (3)—Three lectures. Prerequisite, Phys. 201 f.

Continuation of Phys. 201 f. (Eichlin.)

PHYS. 203 f. *Quantum Theory* (3)—Three lectures.

Discussion of the application of the principles of the quantum theory to black body radiation, spectroscopy, collision processes, valence, etc. (Eichlin.)

PHYS. 204 s. *Nuclear Physics* (3)—Three lectures.

Discussion of the constitution of the nucleus, natural radioactivity disintegration processes, neutron, positron, nuclear energy states, artificial disintegration, etc. (Eichlin.)

PHYS. 205 f. *Fundamental Concepts of Modern Physics* (3)—Three lectures.

Comprehensive survey of the history of physics; the electromagnetic theory of radiation; interaction of radiation and matter; introduction to the quantum mechanics. (Not given in 1937-1938.) (Eichlin.)

PHYS. 206 s. *Fundamental Concepts of Modern Physics* (3)—Three lectures. Prerequisite, Phys. 205 f.

Continuation of Phys. 205 f. (Not given in 1937-1938.) (Eichlin.)

PHYS. 207 f. *Electrodynamics* (3)—Three lectures.

A mathematical study of electrostatics and electromagnetics with applications to diffraction, dispersion, electro- and magneto-optics. (Not given in 1937-1938.) (Dickinson.)

PHYS. 208 s. *Physical Optics* (3)—Three lectures.

A mathematical study of the electromagnetic theory of light, with applications to interference, diffraction, dispersion, polarization. (Not given in 1937-1938.) (Dickinson.)

PHYS. 209 y. *Seminar* (2).

Presentation of reports and discussion of current developments in physics and of original investigations on special problems. (Staff.)

PHYS. 210 y. *Research*.

The investigation of special problems in physics. (Staff.)

#### POLITICAL SCIENCE

ASSOCIATE PROFESSOR STEINMEYER; LECTURERS OATMAN, LASSON.

POL. SCI. 1 f or s. *American National Government* (3)—Three lectures. Open to freshmen.

A study of the legislative, executive, and judicial organization and functions of the national government of the United States. This is the basic course for political science majors.

POL. SCI. 4 s. *State Government* (2)—Two lectures. Open to freshmen.

A study of the legislative, executive, and judicial functions of the States, with emphasis given to the government of Maryland.

POL. SCI. 5 f. *Municipal Government* (2)—Two lectures. Prerequisite, Pol. Sci. 1 f or s.

A study of the organization and functions of the various types of city government in the United States. Course includes a visit to the City of Baltimore, the purpose of which is to study the important departments at work.

POL. SCI. 7 f. *Comparative Government* (2)—Two lectures. Prerequisite, Pol. Sci. 1 f or s.

A survey of the British Empire, including a study in detail of the parliamentary system of Great Britain. Course covers the governmental systems of France and Switzerland.

POL. SCI. 8 s. *Comparative Government* (2)—Two lectures. Prerequisite, Pol. Sci. 1 f or s.

A comparative study of the governments of Germany, Russia, Italy, Japan, etc.

#### For Advanced Undergraduates and Graduates

POL. SCI. 101 f. *International Law* (3)—Three lectures.

A study of the principles governing international intercourse in time of peace as well as war, as illustrated in texts and cases. (Steinmeyer.)



POL. SCI. 102 s. *International Relations* (3)—Three lectures.

A study of the nature and importance of international relations; underlying problems; agencies of control; development of international organizations. (Steinmeyer.)

POL. SCI. 103 f. *Current Problems in Government* (2)—Two lectures.

This course deals with the governmental problems having an international character, such as the causes of war, the problem of neutrality, propaganda, etc. Course conducted by lecture and discussion method, with students required to report on readings from current literature. (Steinmeyer.)

POL. SCI. 104 s. *Current Problems in Government* (2)—Two lectures.

This course, conducted along lines similar to those of Pol. Sci. 103 f, deals with domestic problems of the government of the United States. (Lasson.)

POL. SCI. 105 f. *Constitutional Law* (3)—Three lectures. Prerequisite, Pol. Sci. 1 f or s.

A study of constitutional law in the United States, as interpreted by the Supreme Court. Special attention is given to the American federal system, the amending clause, the powers of the President, Congress, and the National Judiciary. (Lasson.)

POL. SCI. 107 f. *Political Parties and Public Opinion* (2)—Two lectures. Prerequisite, Pol. Sci. 1 f or s.

The political party as a part of the political machinery; party organization; party activities; campaign methods; public opinion and party leadership; the true function of parties.

POL. SCI. 109 f. *Early Political Theory* (2)—Two lectures.

A survey of the principal theorists who have influenced political thought and development. This course covers the various theories from Plato to the middle of the nineteenth century. (Oatman.)

POL. SCI. 110 s. *Recent Political Thought* (2)—Two lectures.

A study of the political schools of thought from the middle of the nineteenth century to the present time. Special reference is made to such recent developments as Socialism, Communism, Fascism, Nazism, etc. (Steinmeyer.)

### POULTRY HUSBANDRY

PROFESSORS JULL, WAITE; ASSOCIATE PROFESSOR QUIGLEY.

POULTRY 1 s. *Farm Poultry* (3)—Three lectures.

A general course in poultry raising, including housing, feeding, incubation, brooding, breeds, breeding, selection of stock, culling, general management, and marketing.

### For Advanced Undergraduates and Graduates

POULTRY 102 f. *Poultry Keeping* (4)—Two lectures; two laboratories. Students encouraged but not required to take Poultry 1 s as a prerequisite.

A study of housing and yarding, practice in making poultry house plans, feeding, killing, and dressing.

POULTRY 103 s. *Poultry Production* (4)—Two lectures; two laboratories. Prerequisites, Poultry 1 s and 102 f.

The theory and practice of incubation and brooding, both natural and artificial. Study of incubators and brooders, assembling, etc. Considerable stress will be placed on the proper growing of chicks into good laying pullets. General consideration of poultry disease. Caponizing.

POULTRY 104 f. *Poultry Breeds*. (4)—Two lectures; two laboratories. Prerequisites, Poultry 1 s, 102 f, and 103 s.

A study of the breeds of poultry, the judging of poultry, including culling, fitting for exhibition, and the methods of improvement by breeding.

POULTRY 105 s. *Poultry Management* (4)—Two lectures; two laboratories. Prerequisites, Poultry 1 s, 102 f, 103 s, and 104 f.

A general fitting together and assembling of knowledge gained in the previous courses. Culling, marketing, including both selling of poultry products and the buying of supplies, keeping poultry accounts, hatchery management and operation, a study of poultry profits, how to start.

### PSYCHOLOGY

PROFESSOR SPROWLS; LECTURER HALL; MR. CLARK.

PSYCH. 1 f or s. *Elements of Psychology* (3)—Two lectures and one discussion. Open to sophomores. Seniors receive but 2 credits.

An elementary course describing and explaining the basic facts of mental life and psychological terminology. It lays the foundation for a general understanding of psychological literature, as well as for advanced study in psychology.

PSYCH. 2 f or s. *Experimental Psychology* (3)—Two lectures and one laboratory. Prerequisite, Psych. 1 f or s.

Theoretical discussion and experimental investigation of the cutaneous, gustatory, visual, olfactory, auditory, and kinaesthetic modalities of experience. Kymographic recording of reflexes associated with systemic emotional and esthetic processes.

### For Advanced Undergraduates and Graduates

PSYCH. 106 s. *Mental Hygiene* (3)—Two lectures and one clinic at St. Elizabeth's Hospital. Prerequisite, Ed. Psych. 1 f or Psych. 1 f or s.

Designed especially for students of education, home economics, pre-medical and pre-legal courses. A study of mental disorders in terms of personal



and social adaptation. Problems of adjustment in social relations: obsessions, fears, conflicts, inhibitions, and compensations. (Sprowls.)

PSYCH. 108 s. *Personnel Psychology* (2)—Two lectures. Prerequisite, Psych. 1 f or s.

Psychological problems of modern business. A consideration of selection and classification of employees, personnel guidance, employer-employee relations; aspects of business leadership. (Clark.)

#### For Graduates

ED. PSYCH. 200 f. *Systematic Educational Psychology* (3)—An advanced course for teachers and prospective teachers. Open only to graduate students.

Deals with the major contributions of psychology to educational theory from Herbert to the present time. (Sprowls.)

### SOCIOLOGY

PROFESSOR MANNY; ASSOCIATE PROFESSOR JOSLYN; ASSISTANT PROFESSOR CLOWES; DR. JACOBI, MR. WITTLER.

Soc. Sci. 1 y. *Introduction to the Social Sciences* (6)—One lecture; two discussions. Open to freshmen and sophomores only.

This course serves as an orientation to advanced work in the social sciences. In the first semester, the basis, nature, and evolution of society and social institutions are studied. During the second semester the major problems of modern citizenship are analyzed in terms of knowledge contributed by economics, history, political science, psychology, and sociology.

Soc. 1 f or s. *Principles of Sociology* (3)—Three discussions. Prerequisite, sophomore standing.

An analysis of society and the social processes; the relation of the individual to the group; social products; social change.

Soc. 2 s. *Cultural Anthropology* (2)—Two lectures. Prerequisite, sophomore standing.

An analysis of the cultures of several primitive and modern societies, the purpose of which is to ascertain the nature of culture and the processes related to it. Museum exhibits will be utilized.

#### For Advanced Undergraduates and Graduates

Soc. 101 f. *Rural Sociology* (2)—Two lectures. Each graduate student will be required to prepare an extra term paper.

The structure and functions of rural communities, ancient and modern; the evolution of rural culture; rural institutions and their problems; the psychology of rural life; composition and characteristics of the rural population; relation of rural life to the major social processes; the social aspects of rural planning. (Manny.)

Soc. 102 s. *Urban Sociology* (2)—Two lectures. Each graduate student will be required to prepare an extra term paper.

The origin and growth of cities; composition and characteristics of city populations; the nature and significance of urbanization; the social structure and functions of the city; urban personalities and groups; cultural conflicts arising out of the impact of urban environment. (Joslyn.)

Soc. 103 f. *Criminology and Penology* (3)—Three lectures. Prerequisite, Soc. Sci. 1 y or Soc. 1 f or s.

The nature and extent and cost of crime; causative factors; historical methods of dealing with criminals; apprehension of alleged criminals; the machinery of justice; penal institutions; other means of caring for convicted persons; the prevention of crime. (Jacobi.)

Soc. 104 s. *Social Psychology* (3)—Three discussions. Prerequisite, Soc. 1 f or s or Psych. 1 f or s.

The development of human nature and personality as products of social experience and interaction; the behavior of public audiences, groups, crowds, and mobs; the development and functioning of such psycho-social forces as imitation, styles, fads, leadership, public opinion, propaganda, nationalism, etc. (Manny.)

Soc. 105 f. *Social Organization* (2)—Two lectures. Prerequisite, Soc. 1 f or s.

Social groupings above the family in size as found among primitives and modern civilizations including neighborhoods, communities, special interest organizations, etc.; leadership and followership in organization activities; interorganizational conflict and cooperation. (Joslyn.)

Soc. 107 s. *Social Pathology* (3)—Three lectures. Prerequisite, Soc. 1 f or s, or consent of instructor.

Causative factors and social complications in individual and group pathological conditions; historic methods of dealing with dependent, defective, and delinquent classes. (Joslyn.)

Soc. 109 f. *Introduction to Social Work* (3)—Three lectures. Prerequisite, Soc. 107 s, or consent of instructor.

Brief historical review of the evolution of social work. Present day types of social work, institutional treatment, public and private agencies; the theory and technic of social case work; recent developments arising out of the depression; visits to representative social agencies. This course is intended primarily for persons intending to take advanced professional training in this field. (Joslyn.)

Soc. 110 s. *The Family* (2)—Two lectures. Prerequisite, Soc. 1 f or s.

Anthropological and historical backgrounds; biological, economic, psychological, and sociological bases of the family; the role of the family in personality development; family and society; family disorganization; family adjustment and social range. (Jacobi.)



Soc. 111 f. *Recent Social Thought*. (2)—Two lectures. Prerequisite, Soc. 1 f or s, and consent of instructor; intended mainly for sociology majors and minors.

Critical study of the leading schools of sociological thought in various countries since 1900. (Joslyn.)

Soc. 113 f. *Dynamics of Population* (2)—Two lectures. Prerequisite, Soc. 1 f or s, and Gen. 111 f, or consent of instructor.

Causes of population growth and decline; major population migrations; population pressure and international problems; eugenic factors; statistical analyses of population trends in the United States. (Not given in 1937-1938.) (Joslyn.)

Soc. 115 f. *The Village* (2)—Two lectures. Prerequisite, junior standing. An extra term paper will be required of each post-graduate student.

The evolution of the American village; present day social structure and functions of the village; an analysis of village population; the relationship of the village to urban and open-country areas; village planning. (Manny.)

Soc. 150 s. *Field Practice in Social Work* (2). Open only to sociology majors upon consent of instructor. Enrollment restricted to available opportunities.

Supervised field work of various types suited to the needs of the individual students. (Manny.)

#### For Graduates

Soc. 201 f or s. *Sociological Research* (2-4). Credit proportional to work accomplished.

Individual research projects involving either field work or analysis of compiled data. (Staff.)

Soc. 202 f or s. *Seminar in Sociological Theories* (2).

Assigned topics for discussion, dealing primarily with major sociological theories and problems. Designed for major students in the department of Sociology. (Staff.)

#### SPEECH

PROFESSOR RICHARDSON; ASSISTANT PROFESSORS EHRENSBERGER, LORENZ;  
MISS ABBIATI.

SPEECH 1 y. *Reading and Speaking* (2)—One lecture.

The principles and techniques of oral expression, visible and audible; the preparation and delivery of short original speeches; impromptu speaking; reference readings, short reports, etc. Opportunities of Speech Clinic open to students. Required of all four year students. Each semester of this course will be repeated in the following semester.

SPEECH CLINIC—No credit.

Speech examinations; training in speech and voice; remedial work in minor speech difficulties. The work of the Clinic is conducted in individual conferences and in small group meetings. Hours are arranged by consultation with the respective instructors.

SPEECH 2 y. *Fundamentals of Speech* (4)—Two lectures.

Studies in the bases and mechanics of speech. Emphasis on voice and diction. This course does not deal with public speaking exclusively; it is concerned with the whole speech function in private as well as public manifestations. It is given primarily for students who expect to do extensive work in speech. Any student electing this course may take it concurrently with or after completing Speech 1 y.

SPEECH 3 f. *Advanced Public Speaking* (2)—Two lectures.

Advanced work on basis of Speech 1 y, with special applications and adaptations. At each session of the class a special setting is given for the speeches—civil, social, and political organizations, etc., and organizations in the fields of the prospective vocations of the different students. When a student has finished this course he will have prepared and delivered one or more speeches which would be suitable and appropriate before any and all bodies that he would probably have occasion to address in after-life.

SPEECH 4 s. *Advanced Public Speaking* (2)—Two lectures.

Continuation of Speech 3 f.

SPEECH 5 f. *Oral Technical English* (2)—Two lectures.

The preparation and delivery of speeches, reports, etc., on both technical and general subjects. This course is especially adapted to the needs of engineering students. Required of all sophomore engineering students.

SPEECH 6 y. *Advanced Oral Technical English* (2)—One lecture.

This course is a continuation of Speech 5 f. Special emphasis upon engineering projects that fall within the student's own experience. Class discussion and criticism of all speeches and reports. Required of all junior engineering students.

SPEECH 7 y. *Advanced Oral Technical English* (2)—One lecture.

Advanced work on the basis of Speech 6 y. Work not confined to class room. Students are encouraged to deliver addresses before different bodies in the University and elsewhere. Senior seminar. For senior engineering students only.

SPEECH 9 f. *Extempore Speaking* (1)—One lecture.

Much emphasis on the selection and organization of material. Class exercises in speaking extemporaneously on assigned and selected subjects. Newspaper and magazine reading essential. Training in parliamentary law.



SPEECH 10 s. *Extempore Speaking* (1)—One lecture.  
Continuation of Speech 9 f.

SPEECH 11 f. *Argumentation* (2)—Two lectures.

This course stresses not formal debating, but forms of persuasion which will be useful in business and professional life. It deals, to a great extent, with ways in which human beliefs and behavior may be influenced by logical discussion.

SPEECH 12 s. *Argumentation* (2)—Two lectures.  
Continuation of Speech 11 f.

SPEECH 13 f. *Oral Reading* (1)—One lecture.

A study of the technique of vocal expression. The oral interpretation of literature. The practical training of students in the art of reading.

SPEECH 14 s. *Oral Reading* (1)—One lecture.  
Continuation of Speech 13 f.

SPEECH 15 f. *Advanced Oral Reading* (1)—One lecture. Prerequisite, Speech 13 f or 14 s or the equivalent (if work is entirely satisfactory). Advanced work in oral interpretation.

SPEECH 16 s. *Advanced Oral Reading* (1)—One lecture. Prerequisite, Speech 13 f or 14 s (if work is entirely satisfactory) or the equivalent. Continuation of Speech 15 f.

## ZOOLOGY

PROFESSORS PIERSON, TRUITT; ASSOCIATE PROFESSOR PHILLIPS; MR. BURHOE, DR. NEWCOMBE, MR. STULL.

ZOOL. 1 s. *General Zoology* (4)—Two lectures; two laboratories.

An introductory course which is cultural and practical in its aim. It deals with the basic principles of animal development, structure, relationships, and activities, a knowledge of which is valuable in developing an appreciation of the biological sciences. Typical invertebrates and a mammalian form are studied.

ZOOL. 2 f. *Elements of Zoology* (3)—Two lectures; one demonstration.

A course for the student who desires a general knowledge of the principles underlying the growth, development, and behavior of certain animals, including man.

ZOOL. 3 f. *Invertebrate Morphology* (4)—Two lectures; two laboratories. Required of students whose major is zoology and of premedical students.

This course consists in a study of the comparative morphology of selected invertebrate groups.

ZOOL. 4 s. *Comparative Vertebrate Morphology* (4)—Two lectures; two laboratories.

A comparative study of selected organ systems in certain classes. Required of students whose major is zoology and of premedical students.

ZOOL. 5 s. *Economic Zoology* (2)—Two lectures. Prerequisites, one course in zoology and one course in botany.

The content of this course will center around the problems of preservation, conservation, control, and development of the economic wild life with special reference to Maryland. The lectures will be supplemented by assigned readings and reports.

This course, combined with Zool. 6 s, should form a part of the basic training for professional foresters, game proctors, and conservationists.

ZOOL. 6 s. *Field Zoology* (3)—One lecture; two laboratories. Prerequisites, one course in zoology and one in botany.

This course consists in collecting and studying both land and aquatic forms of nearby woods, fields, and streams, with emphasis upon insects and certain vertebrates, their breeding habits, environment, and economic importance. Intended for teachers of biology, and also for those who have a special interest in nature study and outdoor life.

ZOOL. 12 f. *Animal Histology* (3)—One lecture; two laboratories. Prerequisite, one course in zoology.

A study of animal tissues and the technic involved in their preparation for microscopic examination.

ZOOL. 15 f. *Human Physiology* (3)—Two lectures; one laboratory. Not open to freshmen.

For students who desire a knowledge of human anatomy and physiology. Emphasis is placed upon the physiology of digestion, circulation, respiration, and reproduction.

ZOOL. 16 s. *Human Physiology* (3)—Two lectures; one laboratory. Not open to freshmen.

Similar to Zool. 15 f. Primarily for home economics students.

ZOOL. 20 s. *Vertebrate Embryology* (3)—One lecture; two laboratories. Prerequisite, one course in zoology. Limited to thirty students. Consent of instructor must be obtained before registration. Required of students whose major is zoology.

The development of the chick to the end of the fourth day.

## Advanced Undergraduates and Graduates

ZOOL. 101 f or s. *Mammalian Anatomy* (3)—Three laboratories. Registration limited. Permission of the instructor must be obtained before registration.

A course in the dissection of the cat or other mammal. Recommended for premedical students, for those whose major is zoology, and for prospective teachers of science in high schools. (Pierson.)



ZOOL. 102 s or f. *Mammalian Anatomy* (3)—Three laboratories.

A continuation of Zool. 101 f or s. (Pierson.)

ZOOL. 103 f and s. *General Animal Physiology* (6)—Two lectures; one laboratory. Prerequisites, one year of chemistry and one course in vertebrate anatomy. Registration limited to twelve, and permission of instructor must be obtained before registration for either semester.

The first semester work deals with the principles of cellular and general physiology; the second semester is devoted to an application of these principles to the higher animals. (Phillips.)

ZOOL. 105 y. *Aquiculture* (4)—One lecture; one laboratory. Prerequisite, one course in zoology.

A comprehensive consideration of the properties of natural waters which render them suitable as environments for animals. (Truitt.)

ZOOL. 106 y. *Journal Club* (2)—One session. Not open for credit to juniors.

Reviews, reports, and discussions of current literature. Required of all students whose major is zoology. (Staff.)

ZOOL. 108 f and s. *Faunistic Zoology* (6)—Two lectures; one laboratory. Prerequisite, a knowledge of invertebrate and vertebrate morphology.

Classification, distribution, and habitat studies of animals in which local forms are stressed for purpose of illustration. (Newcombe.)

ZOOL. 111 f; 112 s. *Human Osteology* (2-6)—A laboratory course. Registration limited. Permission of the instructor must be obtained before registration.

A descriptive study of the human skeleton. (Not given in 1937-1938.) (Pierson.)

ZOOL. 120 s. *Animal Genetics* (3)—Two lectures; one laboratory. Permission of the instructor must be obtained before registration.

The fundamental principles of heredity and variation. While primarily of interest to students of biology, this course will be of value to those interested in the humanities. Required of students whose major is zoology who do not have credit for Gen. 101 f. (Burhoe.)

#### For Graduates

ZOOL. 200 y. *Marine Zoology* (6)—One lecture; two laboratories.

Problems in salt water animal life of the higher phyla. (Truitt.)

ZOOL. 201 y. *Advanced Vertebrate Morphology* (6)—One lecture; two laboratories.

Comparative morphology of selected organ systems of the important vertebrate classes. (Pierson.)

ZOOL. 203 y. *Advanced Embryology* (6)—One lecture; two laboratories.

Mechanics of fertilization and growth. A review of the important contributions in the field of experimental embryology and development of animals. Opportunity will be given for individual research. (Burhoe.)

ZOOL. 204 y. *Advanced Animal Physiology* (6)—One lecture; two laboratories.

The principles of general and cellular physiology as found in animal life. (Phillips.)

ZOOL. 205 y. *Biology of Marine Organisms* (6)—One lecture; two laboratories.

Biotic, physical, and chemical factors of the marine environment, including certain fundamental principles of oceanography. Special reference is made to the Chesapeake Bay region. (Newcombe.)

ZOOL. 206 y. *Research*—Credit to be arranged. (Staff.)

#### CHESAPEAKE BIOLOGICAL LABORATORY

This laboratory, located in the center of the Chesapeake Bay country, is on Solomons Island, Maryland. It is sponsored by the University in cooperation with the Maryland Conservation Department, Goucher College, Washington College, Johns Hopkins University, Western Maryland College, and the Carnegie Institution of Washington, in order to afford a center for wild life research and study where facts tending toward a fuller appreciation of nature may be gathered and disseminated. The program projects a comprehensive survey of the biota of the Chesapeake region.

The laboratory is open from June until September, inclusive; and during the summer of 1937 courses will be offered in the following subjects: Algology, Experimental Zoology, Physiology, Diatoms, Economic Zoology, Invertebrate Zoology, Biological Problems.

These courses, of three credit hours each, are for advanced undergraduates and graduates. They cover a period of six weeks. Not more than two courses may be taken by a student, who must meet the requirements of the Department of Zoology as well as those of the Laboratory before matriculation. Each class is limited to five matriculants. Students working on special research problems may establish residence for the entire summer period.

Laboratory facilities, boats of various types fully equipped (pumps, nets, dredges, and other apparatus), and shallow water collecting devices are available for the work without extra cost to the student.

For full information consult special announcement, which may be obtained by applying to R. V. Truitt, Director, College Park, Maryland.



# SECTION IV

## DEGREES, HONORS, STUDENT REGISTER

DEGREES CONFERRED, 1935-1936

### HONORARY DEGREES

CHARLES HENRY DAVIS, Doctor of Engineering  
FRED PIERCE CORSON, Doctor of Letters

### HONORARY CERTIFICATES OF MERIT

REVON SAMUEL DILLON  
CHARLES SIEGWART  
FRED CARROLL JONES

### THE GRADUATE SCHOOL

#### Doctor of Philosophy

WILLIAM HENRY ANDERSON B.S. University of Maryland, 1931 M.S. University of Maryland, 1932	Dissertation: "A Comparative Study of the Labium of Coleopterous Larvae."
M. THOMAS BARTRAM A.B. Pennsylvania State College, 1929 M.S. University of Maryland, 1931	Dissertation: "The Detection and Significance of the Escherichia-Aerobacter Group of Bacteria in Milk."
WILLIAM PARSONS CAMPBELL A.B. St. John's College, 1931 M.S. University of Maryland, 1933	Dissertation: "The Oxidative Degradation of Friedelin."
REGINALD SCOTT DEAN B.S. University of Missouri, 1915 M.S. University of Missouri, 1916	Dissertation: "Physicochemical Nature of Metal- lic Interfaces."
ARTHUR P. DUNNIGAN B.S. University of Maryland, 1930 M.S. University of Maryland, 1932	Dissertation: "Factors Affecting the Growth and Visibility of Lactobacillus-Acidoph- ilus."
HARRY MAREAN DUVALL B.S. University of Maryland, 1932	Dissertation: "The Selenium Dehydrogenation of Ursolic Acid. (Part 1.) The Preparation of Methoxy Acetal- dehyde. (Part 2.)"

WILLIAM ELLSWORTH EVANS, JR. B.S. George Washington Univer- sity, June, 1929 M.S. George Washington Univer- sity, October, 1929	Dissertation: "A Comparative Study of the Phar- macological Properties of Isoar- temisin, Santoninamine, and San- tonin."
EINAR PHILIP FLINT B.S. University of Washington, 1930 M.A. George Washington Univer- sity, 1932	Dissertation: "The Ternary System Lime-Boric Oxide-Silica."
WILLARD THEODORE HASKINS B.Chem. Cornell University, 1930 M.S. University of Maryland, 1933	Dissertation: "The Selenium Dehydrogenation of Friedelinol. (Part 1.) The Bromination of Friedelin. (Part 2.)"
ARTHUR BUCHER HERSBERGER B.S. University of Maryland, 1932 M.S. University of Maryland, 1933	Dissertation: "Asphaltenes in Lubricating Oils."
CASIMIR THADDEUS ICHNIOWSKI B.S. in Pharmacy, University of Maryland, 1930 M.S. University of Maryland, 1932	Dissertation: "The Bioassay of Digitalis with Observations on the pH Factor."
JOSEPH RAYMOND KANAGY B.S. Westminster College, 1928 A.M. Oberlin College, 1930	Dissertation: "The Heat of Solution and Some Partial Molal Quantities of the Constituents in Aqueous Solutions of the Decahydrate of Solium Tet- raborate."
JACOB MARTIN LUTZ B.S. Michigan State College, 1928	Dissertation: "Physiological Factors Influencing the Ripening of Kieffer Pears."
OLE ANKER NELSON B.S. North Dakota Agricultural College, 1918 M.S. Princeton University, 1919	Dissertation: "Calcium Arsenates—an Investiga- tion into the Three Component System: Calcium Oxide - Arsenic Oxide, and Water."
WILLIAM WARD PIGMAN B.S. George Washington Univer- sity, 1932 M.S. George Washington Univer- sity, 1933	Dissertation: "Some Derivatives of D-Talose."
HARRY ROSEN B.S. in Pharmacy, George Wash- ington University, 1931 M.S. University of Maryland, 1933	Dissertation: "The Pharmacology of Pyrethrum Flowers."



CLARENCE EMIL STEINBAUER  
B.S. University of Minnesota, 1930  
M.S. University of Minnesota, 1931

HARRY ALLEN TEITELBAUM  
B.S. University of Maryland, 1929

ROSS C. THOMPSON  
B.S. Colorado State College, 1923  
M.S. Colorado State College, 1925

MARK WINTON WOODS  
B.S. University of Maryland, 1931  
M.S. University of Maryland, 1933

Dissertation:  
"Studies on the Rest Period of  
Tubers of the Jerusalem Artichoke  
(*Helianthus Tuberosus*, L.)"

Dissertation:  
"The Effect of Posterior Lobe Ex-  
tract, Adrenalin, and Pilocarpine  
on the Response of the Thyroid  
Gland to the Thyreo-Activator Hor-  
mone of the Anterior Lobe of the  
Hypophysis."

Dissertation:  
"Genetic Relations of Some Color  
Factors in Lettuce (*Lactuca Sativa*  
and *L. Scariola*)."

Dissertation:  
"The Nucleolus in Tulipa."

#### Master of Arts

EVELYN FULLER BALLOU  
GENEVIEVE SPENCE BLEW  
EDWARD M. CUSTIS  
WILLIAM CLAGGETT DORSEY DONOHO  
JOSEPH TEVYA ELVOVE  
JEAN GRACE HAMILTON  
MILDRED IVES  
JANE WRIGHT JACK

OLGA CHRISTINA LOFGREN  
IRMA MCCAULEY  
FRANCIS EVERETT MEREDITH  
HERBERT FRANCIS MITCHELL  
CECIL SCHUTT  
PERRY OLIVER WILKINSON  
CHARLES W. WILLIAMS

#### Master of Science

JOHN BRUEN BARTLETT  
FRANCES F. BECK  
WILLIAM EVERETT BELL  
MELVIN F. W. DUNKER  
JOHN HARTSHORN EISEMAN  
GUY WATSON GIENGER  
HENRY GEORGE HARNS  
ELIZABETH EDGE HAVILAND  
GEORGE LAWRENCE KALOUSEK  
HERMAN KESSLER

GEORGE PETER LACHAR  
ALICE ROOSEVELT LEE  
ROY WILLIAM LENNARTSON  
GEORGE BERGIN REYNARD  
ERNA MARTA RIEDEL  
HAROLD GEORGE SHIRK  
HUTTON DAVISON SLADE  
RALPH CHARLES WILLIAMS  
PASCHAL PHILIP ZAPPONI

### COLLEGE OF AGRICULTURE

#### Bachelor of Science

HOWARD FRANKLIN ALLARD  
JOHN WALKER BAILEY

FITZ JAMES BARTLETT  
WILLIAM FRANCIS BOARMAN

ARTHUR RODBIRD BUDDINGTON  
BERNARD E. BUSCHER  
HARRY CLIFTON BYRD, JR.  
EDWARD PENDELTON CARTER  
CHESTER MARVIN CISSEL  
HARRY WEBSTER CLARK  
CHARLES CLAYTON CROFT  
WALTER MOULDEN EIKER  
JOHN HOUSE FALES  
WILLIAM NORTHAM GARROTT  
GRACE-LOUISE GREENWOOD  
WAYNE BROOKS HAMILTON  
GEORGE ELLIOTT HARRINGTON  
WILLIAM HOWARD HENDERSON  
THOMAS JACOB HOSHALL  
ELIZABETH LAURETTA HUNTINGTON  
GEORGE BOND HUGHES, JR.  
PAUL H. IMPHONG  
A. WILSON KING

HARRY PEARCE MACCUBBIN  
ELMER LOUIS MAYER  
ARNON LEWIS MEHRING, JR.  
OSCAR JOHNATHON MILLER  
PAUL ELSWORTH MULLINIX  
MICHAEL J. PELCZAR, JR.  
\*JOHN THOMAS PRESLEY  
JOSEPH FRANK PUNCOCHAR  
GARNETT DUNLAP RADEBAUGH  
HERMAN F. RAMSBURG  
JOSEPH WARREN SISSON, JR.  
ELSIE MAY SOCKRIDER  
CLARENCE GRAYSON STEVENS  
ELIZABETH LANE TOOLE  
JAMES HENRY VAWTER  
WILLIAM CAMPBELL WARFIELD  
JAMES LOGAN WEBER  
JACK WOLK

### COLLEGE OF ARTS AND SCIENCES

#### Bachelor of Arts

DOROTHY VERA ALLEN  
HERBERT DUVALL AMBROSE  
JUNE BARNSLEY  
PAUL E. BENJAMIN  
SAMUEL EMORY BOGLEY  
WILLIAM BEALL BOWIE  
JOHN HERBERT BRILL  
CHARLES LELAND CALLAHAN  
EDWARD FRANCIS CAVE  
MILDRED FRANCES CHAPIN  
CORBIN CARROLL COGSWELL, JR.  
\*GEORGE LESLIE CROSSLEY  
GEORGE BERNARD DANTZIG  
MILDRED DAVIDSON  
DOROTHY CATHERINE DONOVAN  
FRANK PATRICK DUGGAN  
ERNEST RISLEY EATON, JR.  
CHARLES EDWARD EDMONDSON  
JOSEPH A. ELLIS  
LOUIS AUGUSTUS ENNIS, JR.  
THEODORE HENRY ERBE  
RALPH IRVING EVANS

JOHN HOWARD FARSON  
ETHEL ALICE FISHER  
CHARLES RAYMOND FOWLER  
HAROLD BERNARD FRIEDMAN  
RAYMOND JENSEN GOODHART  
WILLIAM JOHN GRAHAM, JR.  
MARJORIE RAE GRINSTEAD  
ISIDOR HANDLER  
GEORGE COOK HART  
JAMES FRANCIS HART, JR.  
FREDERIC JENNINGS HASKIN, JR.  
CALEB RICHARD HATHAWAY  
\*TILGHMAN SEWELL HUBBERT  
HERBERT SOUDER HYATT  
WILLIAM KENNETH KAROW  
KATHERINE ELEANOR KESLER  
HENRY RUDOLPH KOZLOSKI  
EDWARD JOHN LIPIN  
ROBERT GRANT LITSCHERT  
RICHARD H. LOVE  
HARRY JOSEPH LYNN  
KENNETH ROSS MASON

\*Degree conferred September, 1935.



RICHARD HOWARD MAURER  
 LYMAN RANDOLPH McABOY  
 SIDNEY PAYNE McFERRIN  
 MARY LYNN McINTIRE  
 SAMUEL WILLIAM HUBBARD MELOY  
 ELEANOR LILIAN MEYER  
 DOROTHY H. MILES  
 DAVID MILLER  
 JEAN MILLER  
 REBECCA CHARLOTTE MILLER  
 EDWARD MARTIN MINION, JR.  
 MIRIAM LOUISE MORELAND  
 WILFORD E. NEVIUS  
 NANCY LEE NORMENT  
 E. ANNE PADGETT  
 MARION ELIZABETH PARKER  
 FRANCES KATHRYN POWELL  
 ANNA MARIE LAURA QUIRK  
 BETTY CLAIRE QUIRK  
 SOL M. REICHER  
 ROBERT TITUS REID

#### Bachelor of Science

JOHN JAMES ABRAHAM, JR.	ALVIN FRANCIS MEYER
DAVID HENRY BALDWIN, JR.	GUY EDWARD MURRAY
EDMUND GEORGE BEACHAM	MORRIS H. REICH
LESTER BROOKS	CARL ELIOT ROTHSCHILD
CHARLES LAMBURN COGSWELL	MORTIMER RUBEN
*JOHN ROEBLING DEPPISH	EDWIN RUSSEL RUZICKA
*RICHARD HARRIS FLOWERS	JEROME GERALD SACKS
SYLVAN ELLIS FORMAN	FREDERICK WILLIAM SIELING, JR.
NATHAN GAMMON, JR.	MILTON SMALL
*LUTHER CHASE GOLDMAN	JAMES BRADY SMITH
GEORGE SMITH GRIER, III	LEONARD SMITH
LEWIS HENRY JANNARONE	WALTER SOLTANOFF
WILLIAM REED JONES	HARMAN L. SPENCER
*PHILIP BROCK KEITLEN	HERBERT X. SPIEGEL
SAMUEL AGER LEISHEAR	*HOWARD STACKHOUSE
WILLIAM HARVEY LEITCH	WILLIAM ALEXANDER STANTON
SOLOMON LOVE	WILLIAM WILSON WILLIAMS
HOMER DAVID LUNG	JOHN KAVANAUGH WOLFE
HATTIE LOUISE MADDOX	HAROLD KENNETH YOUNG
*JACOB MANDEL	

\*Degree conferred September, 1935.

#### SCHOOL OF DENTISTRY

##### Doctor of Dental Surgery

PATRICK LOUIS ANDREORIO  
 THEODORE GEORGE ARENDS  
 GEORGE J. BAYLIN  
 KENNETH EARL BLANCHARD  
 JOHN BONANTE  
 LEO BRODIE  
 I. NORTON BROTMAN  
 HERBERT SAMUEL BROWN  
 STUART GEORGE BUPPERT  
 HOWARD ALLEN CARRILL  
 H. MILTON COOPER  
 LANCE NATHANIEL CORBIN  
 JAMES LEOPOLD CORTHOUTS  
 JOHN WILLIAM CRONIN  
 WILLIAM FRANK DECESARE  
 MICHAEL JOSEPH DIGRISTINE  
 EUGENE JOSEPH DIONNE  
 TERRENCE DAVID DONOHUE  
 MARVIN RATLEDGE EVANS  
 WILLIAM AUGUST FISCHER  
 SAMUEL FRIEDMAN  
 ISADORE GLASER  
 SOLOMON GOLDBERG  
 ALVIN A. GREENBERG  
 ROBERT EDWARD HAMPSON  
 SAMUEL HANIK  
 LAWRENCE HARRIS  
 CARLOTTA AUGUSTA HAWLEY  
 RALPH WARREN HODGES  
 ELMER NORMAN HOFFMAN  
 MORRIS HOROWITZ  
 DONALD SCOTT HUNTER  
 MICHAEL IMPRESA  
 BYRON WALLACE INMAN  
 BERNARD JEROME  
 SAMUEL BURKE JOHNSTON, III  
 VERNON DELBERT KAUFMAN  
 OTTO GUIDO KLOTZ  
 LOUIS KRESHTOOL  
 WILLIAM KRESS

BRUNO LEON KUTA  
 HENRY ARTHUR LACHER  
 ROLAND PAUL LEAHY  
 LOUIS LEVINSON  
 MEYER LEWIS LEVY  
 HENRY BERTON McCAULEY, JR.  
 JOSEPH FRANCIS METZ, JR.  
 EVERETT NELSON MEYER  
 LOUIS MILOBSKY  
 HARRY WILLIAM MITTEN, 2ND  
 FRANK MULLER  
 JAMES RICHARD MYERS  
 NORMAN FREDERICK MYERS  
 GERALD MAHER NIEBERGALL  
 HERBERT ORMAN  
 RAY SIDNA PASKELL  
 WILLIAM CHARLES CHRISTOPHER  
 PHILPOT, JR.  
 RALPH RAYMOND RACICOT  
 MERCHLINE MILLS RIDDLESBERGER  
 WESLEY EDWARD ROGLER  
 HAROLD ROSEN  
 HERBERT SABLOFF  
 ALEXANDER SCHOENBRUN  
 DANIEL DAVID SCHWARTZ  
 JOHN HINTON SHACKELFORD  
 ABE ALVIN SHAPIRO  
 LEWIS HAMILTON SHIPMAN  
 EDWARD SILVERMAN  
 WILLIAM FRANCIS SULLIVAN  
 JOHN ROBERT SWITZER, JR.  
 LEONARD JOSEPH TARANT  
 GARRISON TRUPP  
 EDWARD ALBERT TULLY  
 FRANCIS CASIMIR TYBURSKI  
 JAMES ARTHUR WALKER  
 WILLIAM THOMAS WALSH  
 HERBERT MILTON WEINSTEIN  
 ROBERT WIEN  
 ALVARO ZEA HERNANDEZ



## COLLEGE OF EDUCATION

### Bachelor of Arts

JOHN JOSEPH ASERO	*JULIA WATERS MILLIKEN
*FRANCES STABLER BARTRAM	MARY EVELYN MORRISON
LIONEL BURGESS	*MARY ELIZABETH MULLIGAN
LOIS THEODORA EDMUNDS	EVERETT HOLLISTER NORTHROP
VELMA BARR EDWARDS	RUTH ELIZABETH PARKER
MARY CATHERINE FISHER	AILEEN MOORE ROHR
MELL FORD	MARION JEAN ROWLAND
CONRAD GEORGE GEBELEIN	*JOSEPH SHEFF
ROUTH VIRGINIA HICKEY	FLORENCE SMALL
MARY CORNELIA KELLER	DOROTHY MAE SMITH
CATHERINE PATRICIA KENNY	ELIZABETH BLAKISTONE THOMPSON
WALTER GEORGE LOHR	BERNARD ORR YONKERS
*JOHN MICHAEL JOSEPH MCKENNA	

### Bachelor of Science

WILLIAM ROBERT BEALL	POLLY HILLMAN MAYHEW
MARY ELIZABETH BEITLER	LAURA ANITA MCCOMAS
WILLIS ALTON BENNER	CATHRYN ELIZABETH MCFARLAND
MARGARET DOANE BLAKE	WILLIAM EDWARD MERRILL
EDITH LONG BRECHBILL	I. EARL OVER
*CARL ALLEN CARLSON	MARGARET ADELE POSEY
VIRGINIA CONNER	IDA FAY REULING
*JEROME DENABURG	GEORGE HENRY SACHS
WILBUR IRVING DUVALL	LEORA LARAWAY SANFORD
WARREN R. EVANS	RUTH WHITE SESSIONS
EDITH D. FORSHEE	RAYMOND KARL SHANK
DAVID FRIEDMAN	ROBERT WEBSTER SLYE
*CATHERINE ROE GREEN	*MARY EMILY MARGARET SMITH
DOROTHY ELIZABETH HANDE	MILO WILCOX SONEN
JACK MASTERS HERBSLEB	KATHRYN MARIE TERHUNE
PALMER FREY HESS	EVELYN CHATHAM TURNER
*MARGARET CAROLYN JONES	VIRGINIA PRICE TURNER
MARY KEMP	CHRISTINE LOUISE WALL
I. WILLIAM LUSTBADER	JOHN ROWLEY WELD
BLANCHE LEE LYDDANE	CLAIRE E. ZERMAN

### Bachelor of Science

#### Industrial Education

FRANK ALBERT CESKEY	JOHN JOSEPH GRIMES
JULIUS YALE CLAYMAN	WILLIAM JOHN HUCKSOLL
MILTON JAYE DICKMAN	JULIA RASPE JOLLY
BERNARD GLATT	ERWIN CLARK MAHANNAH
MANUEL QUEZON GOLDSTEIN	ERNEST BURLEY MARX

\*Degree conferred September, 1935.

HOWARD CONRAD MULLER  
CLARENCE CARL ROHDE  
CHARLES EDWARD POHLMAN SCOTT

ROBERT L. SMITH  
GEORGE LOCHARD WEBSTER

### Teachers' Diplomas

JOHN JOSEPH ASERO	CATHRYN ELIZABETH MCFARLAND
*FRANCES STABLER BARTRAM	MARY LYNN MCINTIRE
WILLIAM ROBERT BEALL	WILLIAM EDWARD MERRILL
WILLIS ALTON BENNER	DOROTHY H. MILES
*STANLEY DOWDELL BROWN	*JULIA WATERS MILLIKEN
*JOHN JOSEPH CADDEN	MIRIAM LOUISE MORELAND
CHESTER MARVIN CISSEL	*MARY ELIZABETH MULLIGAN
VIRGINIA CONNER	PAUL ELSWORTH MULLINIX
WILBUR I. DUVALL	NANCY LEE NORMENT
LOIS THEODORA EDMUNDS	EVERETT HOLLISTER NORTHROP
VELMA BARR EDWARDS	I. EARL OVER
WARREN R. EVANS	RUTH ELIZABETH PARKER
MARY CATHERINE FISHER	MARGARET ADELE POSEY
MELL FORD	FLORENCE ROBERTA REA
DAVID FRIEDMAN	IDA FAY REULING
HAROLD BERNARD FRIEDMAN	AILEEN MOORE ROHR
CONRAD GEORGE GEBELEIN	MARION JEAN ROWLAND
DOROTHY ELIZABETH HANDE	GEORGE HENRY SACHS
WILLIAM HOWARD HENDERSON	LEORA LARAWAY SANFORD
JACK MASTERS HERBSLEB	RAYMOND KARL SHANK
ROUTH VIRGINIA HICKEY	*JOSEPH SHEFF
RUTH ALLEN HUNT	DOROTHY MAE SMITH
MARY CORNELIA KELLER	KATHRYN MARIE TERHUNE
HOMER DAVID LUNG	ELIZABETH BLAKISTONE THOMPSON
I. WILLIAM LUSTBADER	EVELYN CHATHAM TURNER
BLANCHE LEE LYDDANE	VIRGINIA PRICE TURNER
POLLY HILLMAN MAYHEW	JOHN ROWLEY WELD
LAURA ANITA MCCOMAS	CLAIRE E. ZERMAN

## COLLEGE OF ENGINEERING

### Civil Engineer

RAYMOND DOUGLAS BLAKESLEE	GEORGE EDWARD TAYLOR, JR.
THEODORE JOHN VANDOREN, JR.	

### Bachelor of Science

CARROLL SHRYOCK ANDERSON	HARRY VEIGEL BRYAN, JR.
JOHN B. ARMENTROUT	NOEL OKER CASTLE
RAYMOND FREDERICK BARTELMES	JOHN FOUT CHRISTILF
ANDREW BENNIE BEVERIDGE	LEON BIXBY DAVIS
ROGER THURMAN BOLLMAN	BRADY JAMES DAYTON, JR.
JAMES GARDNER BROOKS	JOHN MONROE FIRMIN
BENNARD FOREMAN BRUNS	LOUIS FRANCIS FLAGG

\*Degree conferred September, 1935.



ROBERT BARNHART FOLEY  
SELBY MCKAY FRANK  
JOSEPH H. GALLIHER, JR.  
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AUSTIN JAMES HALL, JR.  
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LUCILE BOWKER	FLORENCE ROBERTA REA
MILDRED EVELYN CARLTON	MARY VIRGINIA TAYLOR
MARY RUTH CROSS	CAROLYN LOUISE VOGT
NELLIE REBEKAH FOUTS	RUTH ELEANOR WELLINGTON
BETTY JANE GOSS	VIRGINIA LAMOND WHITE

## SCHOOL OF LAW

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## Certificate of Proficiency

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GEORGE HYDE ENGEMAN

CAMPBELL LLOYD STIRLING  
VINCENT ALEXANDER TUBMAN

## SCHOOL OF MEDICINE

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FRANCES BECK  
REID LAFEAL BEERS  
MILTON BERNSTEIN  
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WILLIAM GREIFINGER  
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LOUIS JOSEPH KROLL  
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GRANT LUND  
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BENJAMIN BERNARD MOSES  
 JOSEPH ROBERT MYEROVITZ  
 WILLIAM MYERS  
 HANSFORD DORSEY NESTER  
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 MORRIS JOHN NICHOLSON  
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#### SCHOOL OF NURSING

##### Graduate in Nursing

VERNICE LEE BOWLING	SOPHIE ANN LUBINSKI
NINA STIRLING CLAIBORNE	ANNABELLE LOUISE MAGAHA
FRANCES EMILY CONNELLY	HAZEL ALMEDA MILLER
MARGARET TERESSA DELAWTER	MARGUERITE ODOM
RUTH ELIZABETH DODSON	ANNE JESSUP O'SULLIVAN
ANGELA ROSE DOOLEY	DELLA PAULINE RILEY
MARY ELEANOR FOWBLE	MARGARET BOWEN ROSE
MARIAN ELIZABETH HEILMAN	FLORENCE BERYL SMITH
NORMA LOUISE JOHANNES	FRANCES TAYLOE
MARY CATHERINE KEFAUVER	LUCILE GORDON THOMAS
MARY OLREE KNOELLER	RUBY JEAN THOMPSON
GRACE ELIZABETH LINDSAY	VIRGINIA DARE COURTNEY WICKER
DORIS GLYSPY LLOYD	

#### SCHOOL OF PHARMACY

##### Graduate in Pharmacy

\*JESSE SOLOMON

##### Bachelor of Science in Pharmacy

DANIEL JEROME ABRAMSON	MELVIN IRVIN BERKOWICH
FRANK ALBERT BELLMAN	LESTER LEON BURTNICK

\*Degree conferred September, 1935.

BERNARD CHERRY  
 SAMUEL HERBERT COHEN  
 IRVIN DAVID  
 CARROLL PROSS FOSTER  
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 ARTHUR WINAKUR  
 KENNARD LEVINSON YAFFE  
 MORRIS ROBERT YAFFE  
 CHARLES ANTHONY YOUCH

#### HONORS, MEDALS, AND PRIZES, 1935-1936

##### Elected Members of Phi Kappa Phi, Honorary Fraternity

ANDREW BENNIE BEVERIDGE	JOHN FOSTER MAYNARD
GENEVIEVE SPENCE BLEW	IRMA MCCAULEY
LUCILE BOWKER	CATHRYN ELIZABETH MCFARLAND
WILLIAM PARSONS CAMPBELL	ARNON LEWIS MEHRING, JR.
GEORGE BERNARD DANTZIG	NANCY LEE NORMENT
MELVIN F. W. DUNKER	MICHAEL J. PELCZAR, JR.
VELMA BARR EDWARDS	JACK WENDELL PHILLIPS
LOUIS AUGUSTUS ENNIS, JR.	FLORENCE ROBERTA REA
LOUIS FRANCIS FLAGG	DOROTHY MAE SMITH
EINAR PHILIP FLINT	LEONARD SMITH
SYLVAN ELLIS FORMAN	ELSIE MAY SOCKRIDER
LEWIS THOMSON GIBBS	WILLIAM ALEXANDER STANTON
MARJORIE RAE GRINSTEAD	CLARENCE EMIL STEINBAUER
FREDERIC JENNINGS HASKIN, JR.	ELIZABETH BLAKISTONE THOMPSON
CASIMER THADDEUS ICHNIOWSKI	EVELYN CHATHAM TURNER
MARY KEMP	VIRGINIA PRICE TURNER
PAUL LEONARD KING	WILLIAM CAMPBELL WARFIELD
RICHARD H. LOVE	WILLIAM WILSON WILLIAMS
I. WILLIAM LUSTBADER	

\*Degree conferred September, 1935.



### Elected Members of Sigma Xi, Honorary Scientific Fraternity

MARVIN J. ANDREWS  
M. THOMAS BARTRAM  
JOHN OLIVER BURTON  
WILLIAM PARSONS CAMPBELL  
CARL L. DAVIS  
REGINALD SCOTT DEAN  
ARTHUR P. DUNNIGAN  
HARRY MAREAN DUVALL  
ORSON N. EATON  
EINAR PHILIP FLINT  
WILLARD THEODORE HASKINS

ALBERT BUCHER HERSBERGER  
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JACOB MARTIN LUTZ  
HAROLD S. MCCONNELL  
WILLIAM WARD PIGMAN  
HARRY ROSEN  
ROSS C. THOMPSON  
H. BOYD WYLIE

Citizenship Medal, offered by Dr. H. C. Byrd, Class of 1908  
LOUIS AUGUSTUS ENNIS, JR.

Citizenship Prize, offered by Mrs. Albert F. Woods  
ROUTH VIRGINIA HICKEY

Athletic Medal, offered by the Class of 1908  
LOUIS AUGUSTUS ENNIS, JR.

Maryland Ring, offered by Charles L. Linhardt  
WARREN R. EVANS

Goddard Medal, offered by Mrs. Annie K. Goddard James  
WILLIAM CAMPBELL WARFIELD

Sigma Phi Sigma Freshman Medal  
THOMAS PARKER WHARTON

Delta Delta Delta Sorority Medal  
SHIRLEY FLORENCE DANFORTH

Medal and Junior Membership, offered by the American Institute of Chemists  
LEONARD SMITH

Dinah Berman Memorial Medal, offered by Benjamin Berman  
ROBERT LEE MATTINGLY

Mortar Board Cup  
FLORENCE ROBERTA REA

### The Diamond Back Medals

RICHARD MORTON HUNT  
RUTH ELEANOR WELLINGTON  
CARL HUBBARD HUMELSINE

WYATT STANLEY KENNON  
THOMAS ELBERT ROBERTSON  
BRADY JAMES DAYTON, JR.

### The Terrapin Medals

JOHN STEPHEN HEBB, III  
WALTER GEORGE LOHR

RUTH KREITER  
BERNICE ANNE ELLIS

### The Old Line Medals

PYKE JOHNSON  
THEODORE HENRY ERBE  
ROBERT GRANT LITSCHERT

ROUTH VIRGINIA HICKEY  
SAMUEL AGER LEISHEAR

Special Award for freshman or sophomore excelling in reporting.  
LAWRENCE GRANT HOOVER, JR.

### Governor's Drill Cup

COMPANY F, COMMANDED BY CADET CAPTAIN ROBERT WEBSTER SLYE

### Military Faculty Award

CADET COLONEL LOUIS AUGUSTUS ENNIS

### Military Department Medals

CADET MAJOR NOEL OKER CASTLE CADET MAJOR JOHN MONROE FIRMIN  
CADET MAJOR ANDREW BENNIE BEVERIDGE

The Military Medal, offered by the Class of 1899  
CADET WELCH SMITH

### Washington Chapter Alumni Military Cup

FIRST PLATOON, COMPANY G, COMMANDED BY CADET FIRST LIEUTENANT  
LEWIS THOMSON GIBBS

University of Maryland Prize (Flag), to the Best Company Commander  
CADET CAPTAIN ROBERT WEBSTER SLYE

The Scabbard and Blade Cup, to the Commander of the Winning Platoon  
CADET FIRST LIEUTENANT LEWIS THOMSON GIBBS

### The Military Department Freshman Medals

CADET ROBERT MORTON DOBRES CADET ELGIN WAYNE SCOTT, JR.  
CADET ANTONIO CHARLES BONANNO



**Gold Medals (Military Band)**

CADET RALPH LEROY CHILCOAT      CADET PRESLEY ALLEN WEDDING

**Squad Competition Gold Medals**

CADET CORPORAL GEORGE ALFRED      CADET JOHN ALEXANDER KRYNITSKY  
BOWMAN      CADET WARREN PRUDEN DAVIS  
CADET HERBERT SCOTT YOUNG      CADET ROBERT HALLEY BOYD  
CADET RICHARD SHIPLEY BRASHEARS      CADET ROBERT PAUL COOK  
CADET DONALD TILGHMAN FUGITT

**The Executive Medal**

LIEUTENANT COLONEL WALTER BROOKS BRADLEY

**Sons of American Revolution Medals**

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CADET SERGEANT WAYNE PHILIP      CADET COLONEL LOUIS AUGUSTUS  
ELLIS      ENNIS

**Inter-Collegiate Third Corps Area Silver Medal**

CADET WILLARD CECILLIUS JENSEN

**Inter-Collegiate Third Corps Area Rifle Bronze Medal**

CADET SERGEANT RAYMOND DAVIS, JR.

**Military Department Gold Medal, University of Maryland Rifle Team**

CADET ARNON LEWIS MEHRING

**Military Department Gold Medal, University of Maryland Freshman Rifle Team**

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SECOND LIEUTENANTS**

**The Infantry Reserve Corps**

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RAYMOND FREDERICK BARTELMES	NOEL OKER CASTLE
WILLIAM ROBERT BEALL	JOHN FOUT CHRISTHILF
ANDREW BENNIE BEVERIDGE	CORBIN CARROLL COGSWELL, JR.
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LOUIS FRANCIS FLAGG  
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LEWIS THOMSON GIBBS  
EDWARD HARRY DRAKE GIBBS  
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WILLIAM AUDLEY HART  
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JAMES BRADY SMITH  
LEONARD SMITH  
HARMON LEAKE SPENCER  
HENRY CHRISTIAN STROBEL  
ROBERT WALKER THOMAS  
ALBERT WALTER WEBB

**HONORABLE MENTION**

**College of Agriculture**

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ARNON LEWIS MEHRING, JR., ELSIE MAY SOCKRIDER.

Second Honors—ELIZABETH LANE TOOLE, PAUL ELSWORTH MULLINIX,  
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GRINSTEAD, FREDERIC JENNINGS HASKIN, JR., WILLIAM  
ALEXANDER STANTON, LOUIS AUGUSTUS ENNIS, JR.,  
GEORGE BERNARD DANTZIG, RICHARD H. LOVE, ALVIN  
FRANCIS MEYER, CORNELIUS WHALIN.

Second Honors—SAMUEL AGER LEISHEAR, CARL ELIOT ROTHSCHILD, WALTER  
SOLTANOFF, RUTH SIMON, EDMUND GEORGE BEACHAM,  
THEODORE HENRY ERBE, EDWARD FRANCIS CAVE, MARY  
LYNN MCINTIRE, SOLOMON LOVE, DANIEL DEWALT  
WILLARD, SOL M. REICHER, ALTON LEFFINGWELL  
SANFORD.



### College of Education

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VIRGINIA PRICE TURNER, DOROTHY MAE SMITH, EVELYN  
CHATHAM TURNER, MARY KEMP.

Second Honors—I. WILLIAM LUSTBADER, ELIZABETH BLAKISTONE THOMP-  
SON, AILEEN MOORE ROHR, CONRAD GEORGE GEBELEIN,  
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LOUIS FRANCIS FLAGG, JOHN FOSTER MAYNARD.

Second Honors—PAUL LEONARD KING, LEWIS THOMSON GIBBS, JAMES  
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VERNON DELBERT KAUFMAN

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Scholarship,

GRACE ELIZABETH LINDSAY

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ANGELA ROSE DOOLEY

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GRACE ELIZABETH LINDSAY

The Edwin and Leander M. Zimmerman Prize of \$50.00 for Practical  
Nursing and for Displaying the Greatest Interest and Sympathy  
for the Patients,

ANGELA ROSE DOOLEY



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Membership in the Association, for Practical Nursing and  
Executive Ability,

MARGARET TERESSA DELAWTER

School of Pharmacy

Gold Medal for General Excellence

BERTRAM KAMBER

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The L. S. Williams Practical Pharmacy Prize,  
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ALEXANDER OGURICK  
FRANK ALBERT BELLMAN

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MAJOR ROBERT O. HAMMERLUND, Regimental Adjutant  
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CAPTAIN FRANCIS M. BOWER, Regimental Training and Liaison Officer  
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CAPTAIN NORMAN HOBBS, Second-in-Command  
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1st Lieut. Herman W. Berger  
2nd Lieut. Norman P. Pat-  
tersen

#### COMPANY "B"

Captain Eugene F. Mueller  
1st Lieut. Maurice B. Sin-  
sheimer  
2nd Lieut. M. Luther Brote-  
markle

#### COMPANY "C"

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sohn  
1st Lieut. Justin D. Paddle-  
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CAPTAIN ROBERT J. McLEOD, Second-in-Command  
SECOND LIEUTENANT CHARLES H. BEEBE, Battalion Adjutant

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1st Lieut. Walter K. Scott  
2nd Lieut. Charles H. Culp

#### COMPANY "E"

Captain Francis M. Bower  
1st Lieut. Edward J. Fletcher  
2nd Lieut. Thomas B. Harry-  
man

#### COMPANY "F"

Captain J. Dale Patterson  
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Captain Willson C. Clark  
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1st Lieut. R. Bernard  
Graeves

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1st Lieut. Charles S. Furtney  
2nd Lieut. Herman P. Dial

### FOURTH BATTALION

MAJOR PHILIP FIRMIN, Commanding  
CAPTAIN ALBERT P. BACKHAUS, Second-in-Command  
SECOND LIEUTENANT MAX D. ZANKEL, Battalion Adjutant

#### COMPANY "K"

Captain Robert W. Jones  
1st Lieut. Clarence T. Thomason  
2nd Lieut. Charles E. Morgan

#### COMPANY "L"

Captain John S. Shinn  
1st Lieut. John E. Boothe  
1st Lieut. Alfred B. Pettit

### CADET BAND

CAPTAIN HARRY A. DOSCH, Commanding  
FIRST LIEUTENANT ALFRED E. SAVAGE

Band under the direction of Master Sergeant Otto Siebeneichen, Retired, formerly with  
the Army Band, Washington Barracks, Washington, D. C.



## NON-COMMISSIONED OFFICERS

### FIRST BATTALION

#### COMPANY "A"

Belt, Kenneth G.

Baker, Robert E.  
Bishoff, Frederick M.

Baker, Herbert W.  
Barnett, Robert E.

#### COMPANY "B"

##### First Sergeants

Bowman, George A.

##### Platoon Sergeants

Browning, John R.  
Converse, Henry T.

##### Sergeant Guides

Berry, James B.  
Downey, Charles L.

#### COMPANY "C"

Bryant, William C.

Collins, Ralph A.  
DeArmey, Frank T.

Hay, Perry I.  
Hughes, Fred J.

### SECOND BATTALION

#### COMPANY "D"

Egan, John J.

Haimovicz, Joseph P.  
Heaton, Charles C.

Long, Edwin D.  
Lynham, John C.

#### COMPANY "E"

##### First Sergeants

Guckeyson, John W.

##### Platoon Sergeants

Hughes, Warren A.  
Jordan, Ralph S.

##### Sergeant Guides

McWilliams, William J.  
Mims, James R.

#### COMPANY "F"

Headley, L. Coleman

Keller, Ralph W.  
Peffer, Paul R.

Moore, John E.  
Mullett, William B.

### THIRD BATTALION

#### COMPANY "G"

McClesky, Benj. C.

Keller, Joseph E.  
Mattingly, Robert L.

Schutz, John L.  
Shaw, Clay W.

#### COMPANY "H"

##### First Sergeants

McFadden, Duncan B.

##### Platoon Sergeants

Putman, Raymond S.  
Reeves, Samuel W.

##### Sergeant Guides

Smith, Harold W.  
Wheeler, Waverly J.

#### COMPANY "I"

Miller, George P.

Richardson, Donald W.  
Shearer, Ross W.

Yourtee, Leon  
Ravenburg, Ralph R.

### FOURTH BATTALION

#### COMPANY "K"

Owens, Harold M.

Sisler, Fred D.  
Walton, Robert L.

Jacobs, John S.  
Thomas, Fred B.

#### First Sergeants

##### Platoon Sergeants

##### Sergeant Guides

#### COMPANY "L"

Shewbridge, Benj. B.

Pierce, Charles H.  
Wolf, John F.

Peck, Alvin B.

## Register of Students, 1936-1937

### COLLEGE OF AGRICULTURE

#### SENIOR CLASS

Armiger, Walter H., Beltsville  
Bishop, James W., Laurel, Del.  
Boekhoff, Claire L., Chevy Chase  
Bourke, Anne R., Washington, D. C.  
Butler, Henry E., Sudlersville  
Cowgill, William H., Hyattsville  
Crump, Robert T., Frostburg  
Daly, Edmond T., New Brighton, N. Y.  
Dawson, Roy C., Washington, D. C.  
Fletcher, Edward J., Washington, D. C.  
Frazer, Mary W., Washington, D. C.  
Gormley, John J., Chevy Chase  
Guckeyson, John W., Chevy Chase  
Hill, R. Travis, Laurel  
Hobbs, Lewis F., Silver Spring  
Hobson, Barbara E., College Park  
James, William S., Hancock  
Keller, Charles E., Middletown  
Kirshbaum, Amiel, Washington, D. C.  
Leighty, Raymond V., Arlington, Va.  
Lovell, John C., New Windsor  
Marche, William T., Hyattsville

McFadden, Burton M., Hagerstown  
Mendelsohn, Irving P., Washington, D. C.  
Nellis, David C., Takoma Park  
Nezbed, Robert L., Baltimore  
Nolte, William A., Washington, D. C.  
O'Hanlon, Ardle P., Washington, D. C.  
Ortenzio, Louis F., College Park  
Oswald, Elizabeth J., Chevy Chase  
Pettit, Alfred B., Hyattsville  
Piquett, Price G., Catonsville  
Rabbitt, Alton E., College Heights  
Rodier, John M., Lanham  
Shegogue, Edward R., Landover  
Stevenson, Elmer C., Takoma Park  
Thomas, Virginia E., Newark, Del.  
Thornton, Eugene, Jr., Chestertown  
Voris, J. Calvin, Laurel  
Wagaman, Kenneth R., Sabillasville  
Watkins, Dayton O., University Park  
Webb, Clay M., Vienna  
Welch, Aaron W., Galena  
Willis, Victor G., Elkton

#### JUNIOR CLASS

Bowers, Lloyd C., Oakland  
Bowie, Oden, Mitchellville  
Buchholz, James H., Catonsville  
Caplan, Raphael F., Miller Station  
Carter, Henry H., Rockville  
Carver, Ann E., Perryville  
Clark, Ralph E., Dundalk  
Connelly, John V., Riverdale  
Converse, Henry T., Jr., Beltsville  
Downey, Charles L., Williamsport  
Fisher, Elwood G., Washington, D. C.  
Franzoni, Joseph D., Washington, D. C.  
Garletts, Merle A., Selbysport  
Gayhart, Harold E., Beltsville  
Gibbs, William E., Hyattsville  
Gilbertson, Warren H., Bladensburg  
Goldsmith, John S., Allen  
Gottwals, Abram Z., Goldsboro  
Grodjesk, Bernice, Jersey City, N. J.  
Guill, John H., Takoma Park  
Harris, George J., Lonaconing  
Haynes, Anne, Trenton, Tenn.

Haynes, Sally, Trenton, Tenn.  
Henkin, Allen E., Washington, D. C.  
Johnston, Frederick A., Takoma Park  
Kuhn, Albin O., Woodbine  
Lewis, Glenn W., Frederick  
Lung, Ernest H., Smithsburg  
Miller, George P., College Park  
Price, J. Wilmer, Jr., Catonsville  
Ravenburg, Ralph R., Edgewater  
Ruble, Kyle, Poolesville  
Schutz, J. Logan, Washington, D. C.  
Seabold, G. William, Jr., Glyndon  
Shaffer, Charles H., Jr., Washington, D. C.  
Sisler, Fred D., Washington, D. C.  
Skinner, Calvin L., Sudlersville  
Smith, Harold W., Baltimore  
Steiner, Wilmer W., Washington, D. C.  
Stoddard, David L., Hyattsville  
Wall, Dorothy S., Catonsville  
Williams, Donald H., Washington, D. C.  
Wintermoyer, J. Paul, Hagerstown  
Yeager, S. Anita, Baltimore

#### SOPHOMORE CLASS

Astle, Charles C., Rising Sun  
Berkowitz, Melvin, Washington, D. C.  
Brown, Allan H., University Park  
Brownell, James F., Washington, D. C.  
Burnet, James H., Charlottesville, Va.

Cohen, Charlotte F., E. Orange, N. J.  
Crane, Julian C., College Heights  
Davis, Virginia E., Washington, D. C.  
DeCecco, James N., Vienna  
Eck, Clarence A., Baltimore



Egan, John J., Waterbury, Conn.  
 Ermold, John G., Ellicott City  
 Evans, H. K., Bladensburg  
 Galbreath, Paul M., Street  
 Gatch, Benton R., Jr., Baltimore  
 Giloane, William, Baltimore  
 Gianoly, Louis W., Lanham  
 Gordon, Thomas W., Baltimore  
 Hauver, Roland T., Myersville  
 Heubeck, Elmer, Jr., Baltimore  
 Hite, Norborne A., Port Deposit  
 Hopping, Catherine E., Washington, D. C.  
 Hughes, Frank W., Washington, D. C.  
 Jarrell, William E., Ridgely  
 Johnson, Daniel B., Beltsville  
 Johnson, Edwin R., Germantown  
 Keister, H. Deborah, Hyattsville  
 Kilby, Wilson M., Conowingo  
 Lee, Whiting B., Hyattsville  
 Mangawang, Valentin R., Riverdale  
 Martin, Oscar C., Jr., Rockville  
 McFarland, Frank R., Jr., Cumberland  
 Michlovitz, Louis E., Baltimore  
 Miller, Lee A., Hyattsville

Miller, Thomas E., Washington, D. C.  
 Muma, Martin H., Cumberland  
 Nicholls, Robert D., Boyds  
 Oakley, Ned H., Washington, D. C.  
 Peaslee, Joseph K., Washington, D. C.  
 Phelps, Richard N., McDonogh  
 Potter, Lloyd A., Bethesda  
 Remsberg, George C., Jr., Middletown  
 Schmidt, Edward H., Jr., Seat Pleasant  
 Schmier, Charles N., Woodlawn  
 Shaw, Clay W., Stewartstown, Pa.  
 Stevenson, Frank V., Takoma Park  
 Sutton, Richard S., Kennedyville  
 Talcott, Ellen E., Washington, D. C.  
 Tarbett, Lewis N., Takoma Park  
 Tuttle, Ella M., Baltimore  
 Wallace, John A., Bethesda  
 Ward, Stevenson A., Havre de Grace  
 Weber, Ninian B., Oakland  
 Willingham, Patricia M., Hyattsville  
 Winkler, Fred B., Chevy Chase  
 Witt, Detlef J., Anacostia, D. C.  
 Wood, Edward P., Baltimore  
 Yates, William B., Cambridge

#### FRESHMAN CLASS

Ahalt, Louis F., Middletown  
 Aist, Wilmer F., Jessup  
 Aycock, Joseph F., Baltimore  
 Bailey, Howard M., Parkton  
 Baker, Alva S., Catonsville  
 Barber, Charles A., Washington, D. C.  
 Beach, Howard, Wisner, La.  
 Beane, Roberta A., Bennings, D. C.  
 Bosley, Glenn M., Sparks  
 Brosius, John W., Jr., Adamstown  
 Brown, Robert B., Bethesda  
 Burall, Arthur W., Sudlersville  
 Butler, W. Mason, Poolesville  
 Carl, Edmund O., Jr., Washington, D. C.  
 Clark, George E., Jr., Havre de Grace  
 Cleveland, James W., Jr., Garrett Park  
 Connelley, James W., Silver Spring  
 Cotterman, Harold F., College Park  
 Cox, Martha L., Silver Spring  
 Crist, Howard G., Jr., Glenelg  
 Darby, Reuben U., Baltimore  
 Daugherty, Edward B., Jr., Delmar, Del.  
 Dowling, Vernon L., Annapolis  
 Edmonds, Charles S., Clements  
 Egnell, Edward W., New Brighton, N. Y.  
 Firmin, William E., Washington, D. C.  
 Flanigan, John L., Jr., Baltimore  
 Forsyth, Carroll M., Friendsville  
 Foster, Vernon R., Parkton  
 French, Bernard S., Jr., Baltimore  
 Fullington, Page D., Washington, D. C.  
 Furr, Daniel O., Middleburg, Va.  
 Gray, Jean R., Washington, D. C.

Ritzenberg, Albert, Washington, D. C.  
 Robbins, MacIntyre C., Washington, D. C.  
 Rudy, Arthur M., Middletown  
 Ryan, Hilda H., Washington, D. C.  
 Sanders, William R., Sunbury, Pa.  
 Sanner, Staley V., Frederick  
 Saperstein, Paul, Baltimore  
 Scherer, Charles R., Towson  
 Schoolfield, William H., Pocomoke  
 Scoville, Raymond M., Silver Spring  
 Sheibley, David F., Newport, Pa.  
 Smith, Temple C., Greensboro  
 Stabler, Virginia N., Ashton  
 Stevens, Edgar T., New Market

Stevens, Robert L., Street  
 Swann, Agnes H., Leonardtown  
 Swartz, Carlyle O., Laurel  
 Taylor, Frank W., Ridgely  
 Valenstein, Murray A., Baltimore  
 Wardman, Joseph W., Washington, D. C.  
 Weyrich, William H., Jr., Washington, D. C.  
 Winter, Joseph S., Washington, D. C.  
 Wood, Edgar W., Washington, D. C.  
 Wright, Arthur E., Washington, D. C.  
 Young, James G., Baltimore  
 Zimmerman, Robert E., Ellicott City  
 Zipkins, Norman N., Capitol Heights

#### UNCLASSIFIED AND PART TIME

Baynes, William C., Washington, D. C.  
 Bruns, Lawrence A., Relay  
 Donnally, Bessie S., Washington, D. C.  
 Fitzwater, Earl W., Swanton  
 Hough, Louise S., Sandy Spring  
 Kramer, Amihud, Baltimore  
 Lieber, Paul I., Baltimore

Miles, Churchill F., Arlington, Va.  
 Rogers, William I., Beltsville  
 Roop, Clara I., Union Bridge  
 Stahler, Nathan, Baltimore  
 Wilcox, Marguerite S., Washington, D. C.  
 Wise, Sarah E., Relay

#### COLLEGE OF ARTS AND SCIENCES

##### SENIOR CLASS

Amiss, Helen C., Chevy Chase  
 Athey, Thomas B., Jr., Severna Park  
 Avery, John L., Washington, D. C.  
 Balch, Clyde W., Hyattsville  
 Beebe, Charles H., College Park  
 Bell, John W., Hyattsville  
 Bennett, Lucille K., Hyattsville  
 Benson, Brian M., Baltimore  
 Berman, David P., Hoboken, N. J.  
 Billig, S. Deborah, Jamaica, N. Y.  
 Bittinger, Charles Jr., Washington, D. C.  
 Bonnett, Warren L., Aberdeen  
 Boothe, John E., Jr., Washington, D. C.  
 Bower, Francis M., Mt. Rainier  
 Bradley, Walter B., Baltimore  
 Bredekamp, Marriott W., Washington, D. C.  
 Brian, W. P., Ellicott City  
 Brown, A. Freeborn, Havre de Grace  
 Burroughs, Reginald, Upper Marlboro  
 Campiglio, Robert G., Milton, Pa.  
 Capalbo, John L., Brooklyn, N. Y.  
 Clements, Mildred F., College Park  
 Cole, Harold S., Brooklyn, N. Y.  
 Cooke, Charles H., Washington, D. C.  
 Coster, William F., Jr., Elmhurst, N. Y.  
 Cowie, Jean A., Perry Point  
 Culp, Charles H., Whiteford  
 Cummings, Bernard A., Chevy Chase  
 Cutler, Dorothy M., Silver Spring

Daniel, Daniel R., Baltimore  
 Davis, L. Vancile, College Park  
 Davis, Raymond, Jr., Washington, D. C.  
 DeMarco, Carmel, Washington, D. C.  
 Deskin, Mark, Riverdale  
 Dittmar, Gordon F., Baltimore  
 Dolan, Loretta M., Sparrows Point  
 Dosch, Harry A., Jr., Baltimore  
 Downin, John E., Baltimore  
 Drake, Harley D., Jr., Washington, D. C.  
 Drescher, Edward, Hackensack, N. J.  
 Edwards, William W., Chevy Chase  
 Ellinger, Charles F., Baltimore  
 Ellis, Wayne P., Jr., College Park  
 Ellison, Max M., Baltimore  
 Evans, Dorothy E., Takoma Park  
 Everett, Genevieve, Pasadena  
 Farr, Earl W., Jr., Washington, D. C.  
 Fischer, Isadore, Washington, D. C.  
 Fosbroke, Gerald E., Elkridge  
 Gaczynski, Eugenia T., Jersey City, N. J.  
 Gengnagel, Rosella B., Catonsville  
 Godwin, Donnie, Annapolis  
 Goldstein, Ferdinand W., Baltimore  
 Graeves, R. Bernard, Silver Spring  
 Gray, Ralph, Chevy Chase  
 Greenfield, Ray H., Takoma Park  
 Hammerlund, Robert O., Washington, D. C.  
 Hart, John G., Hagerstown  
 Hebb, John S., III, Baltimore



Helfgott, Jack L., Mitchellville  
Hendrix, Nevins B., Port Deposit  
Hennig, Elmer A., Washington, D. C.  
Hill, Florence R., Laurel  
Hobbs, Norman L., Silver Spring  
Hoenes, Sophia W., Baltimore  
Hughes, Robert L., Aberdeen  
Hunt, Richard M., Washington, D. C.  
Ireland, Alfred W., Jr., Baltimore  
Jacques, Lancelot, Jr., Smithsburg  
Jaffe, Vita R., Brooklyn, N. Y.  
Johns, Gladys V., Beltsville  
Johnson, Pyke, Jr., Washington, D. C.  
Johnston, Doris H., Takoma Park  
Jones, Marguerite E., Owings Mills  
Jordan, Francis X., Washington, D. C.  
Kelly, George B., Washington, D. C.  
Kemper, Betty J., East Orange, N. J.  
Keplinger, Anna-Lura, Washington, D. C.  
Klein, Alvin S., Frederick  
Krulvitz, Keaciel, Baltimore  
Land, Robert H., Baltimore  
Lankford, Melvin C., Baltimore  
Lann, Joseph S., Washington, D. C.  
Lansford, Wilson A., Bethesda  
Laukaitis, Peter E., Waterbury, Conn.  
Levy, Arthur I., Brooklyn, N. Y.  
Lewis, Mary W., Bethesda  
Lindner, Dorothy E., Washington, D. C.  
Lundell, Ernie D., Chevy Chase  
Lutes, Lawrence V., Silver Spring  
Maccubbin, Mary F., Laurel  
Marche, Louise C., Hyattsville  
Martinez, Josefa, San Juan, P. R.  
Matson, Ruby I., Takoma Park  
McCaffrey, Richard H., Baltimore  
Melchionna, Olin R., Rochelle Park, N. J.  
Miller, Eunice, Beltsville  
Mitchell, William A., Baltimore  
Mobus, Paul F., Ellerslie  
Morgan, Charles E., Washington, D. C.  
Nedomatsky, Ivan E., Lansdowne  
Newman, Robert A., Chevy Chase  
Nordeen, Georgia A., Mt. Rainier

Osborn, James M., Washington, D. C.  
Paddleford, Justin D., Washington, D. C.  
Panoff, Mortimer, Brooklyn, N. Y.  
Patterson, J. Dale, Indian Head  
Pierce, Karlton W., Washington, D. C.  
Pollack, Frank L., Brooklyn, N. Y.  
Remington, Jesse A., Jr., Laurel  
Richmond, Marion B., Chevy Chase  
Richter, Christian F., Overlea  
Roby, Dorothy V., Riverdale  
Rosen, Janet A., Fort Salonga, N. Y.  
Savage, Dorothy, Washington, D. C.  
Schneider, William R., Ellicott City  
Schuh, Geraldine J., Chevy Chase  
Schwartz, Stanley E., Brooklyn, N. Y.  
Scott, W. Kenneth, Landover  
Seidenberg, Abraham, Washington, D. C.  
Sesso, George A., Washington, D. C.  
Sinsheimer, Maurice B., Jr., Washington, D. C.  
Sklar, Leo J., Far Rockaway, N. Y.  
Smith, F. Edward, Jr., Baltimore  
Smith, Frank S., Pasadena  
Smith, Herbert L., Washington, D. C.  
Somerville, Ruth E., Cumberland  
Sweeney, Thomas R., Washington, D. C.  
Talbott, Priscilla M., Bristol  
Thomason, Clarence T., Washington, D. C.  
Thompson, Kathryn E., Daytona Beach, Fla.  
Venemann, Virginia L., Riverdale  
Waters, Albert G., Washington, D. C.  
Watson, Stanley B., Brandywine  
Wells, Joan K. M., Washington, D. C.  
Willey, Edward J., Washington, D. C.  
Wilson, Iris E., Takoma Park  
Wood, S. Gordon, St. Michaels  
Woodell, John H., Baltimore  
Woodward, Elwyn C., Hyattsville  
Zankel, Max D., Brooklyn, N. Y.  
Zebelean, John F., Catonsville  
Zihlman, Frederick A., Washington, D. C.  
Zimmerman, Gordon K., Washington, D. C.

#### JUNIOR CLASS

Ackerman, J. Emory, Washington, D. C.  
Alter, Irving D., Baltimore  
Atkin, Maurice D., Washington, D. C.  
Baevsky, William D., Penns Grove, N. J.  
Baker, Herbert W., Edgemont  
Baker, Robert E., Washington, D. C.  
Barnett, Robert E., Washington, D. C.  
Baxley, J. W., Ellicott City  
Behm, Carl, Baltimore  
Belt, Kenneth G., College Park  
Benton, Charles L., Jr., Linthicum Heights  
Berry, James B., Jr., Bennings, D. C.

Binswanger, Charles A., Baltimore  
Birmingham, Thomas J., Sparrows Point  
Bowen, Charles V., Centreville  
Bowen, Joseph J., Waterbury, Conn.  
Brigham, David L., Ashton  
Brockman, E. Louise, Riverdale  
Brodsky, Alexander E., Baltimore  
Brooks, Thomas R., Hyattsville  
Brotman, Alfred, Baltimore  
Brown, Thomas C., Havre de Grace  
Buck, Marjorie M., Indian Head

Burton, Robert J., Cumberland  
Carleton, Harold B., Washington, D. C.  
Carrico, Norman, Cumberland  
Cayton, Marcelle I., Brooklyn, N. Y.  
Cayton, William I., Brooklyn, N. Y.  
Clark, Fitzhugh, Germantown  
Cohen, Gertrude C., Passaic, N. J.  
Cooley, Eleanor G., Berwyn  
Corridan, Jack R., Washington, D. C.  
Cox, Philip A., Washington, D. C.  
Crampton, William G., Washington, D. C.  
Crastnopol, Philip, Newark, N. J.  
Creamer, Robert M., Baltimore  
Culp, Richard T., Chevy Chase  
Denney, Fred H., Bladensburg  
Donahoe, Harry C., Chester, Pa.  
Donohue, Mildred D., Baltimore  
Dow, Mary F., Amarillo, Texas  
Duley, Oscar R., Croome Station  
Dwiggins, Roscoe D., College Park  
Edwards, John B., Hyattsville  
Epstein, Edwin, Centreville  
Ernest, Lois E., Kensington  
Evans, F. Deen, Chevy Chase  
Friedman, Jack, Washington, D. C.  
Friedman, Marion, Baltimore  
Gilbertson, Kenneth G., Bladensburg  
Greer, Margaret A., Bel Air  
Gunby, Laura E., Marion  
Gunther, Francis J., Washington, D. C.  
Haimovicz, Joseph P., Washington, D. C.  
Hamburger, Morton L., Baltimore  
Hargy, Francis R., College Park  
Hay, Perry, Washington, D. C.  
Henderson, Joseph, Rockville  
Heringman, Leo A., Baltimore  
Hoagland, Philip L., Washington, D. C.  
Hughes, Fred J., Chevy Chase  
Hughes, Warren A., Washington, D. C.  
Hyslop, Charles D., Silver Spring  
Jackson, Frank H., Chevy Chase  
Jacobs, Bernice E., Baltimore  
Jacobs, John S., Washington, D. C.  
Jacobs, Nathaniel J., Baltimore  
Jewell, Benjamin A., Grasonville  
Johnson, George A., Baltimore  
Johnson, William R., Baltimore  
Jones, Robert W., College Heights  
Judd, Barbara, Washington, D. C.  
Keller, Joseph E., Washington, D. C.  
Kelly, John F., Towson  
Kempton, Christine, Lanham  
Kennon, Wyatt S., Washington, D. C.  
Keppler, William J., Washington, D. C.  
Lawson, J. Keith, Washington, D. C.  
Lee, Richard E., Landover  
Lehmann, Theo S., Baltimore  
Lewald, James H., Laurel  
Lewis, Barbara R., Washington, D. C.

Liberato, Venancio Q., Riverdale  
Lindsay, Gorton P., Baltimore  
Linn, Lois B., Hyattsville  
Littleford, Rita T., Washington, D. C.  
Long, Edwin D., Westover  
Lowe, William C., Stevensville  
Lowitz, Irving R., Baltimore  
Maxwell, Francis T., Towson  
McFadden, Duncan B., New York, N. Y.  
McGoury, Thomas E., Odenton  
McIntire, John N., Oakland  
McLaughlin, Arlene M., Towson  
McWilliams, William J., Indian Head  
Miller, Harry A., Washington, D. C.  
Miller, Mary E., Baltimore  
Miller, Philip, Brentwood  
Molofsky, Bernice, Baltimore  
Moore, John E., Ellicott City  
Morris, Felix R., Bridgeport, Conn.  
Mullett, William B., Silver Spring  
Oliver, Elmer R., Washington, D. C.  
Ostroff, Julius J., Baltimore  
Owens, James D., Linthicum Heights  
Pailthorp, Robert W., Takoma Park  
Park, Charles A., Jr., Washington, D. C.  
Paterson, Jean, Towson  
Pearson, H. R., St. George's Island  
Peffer, Paul R., Washington, D. C.  
Phillips, William S., Jr., Washington, D. C.  
Potts, B. Sheba, Baltimore  
Pratt, Stanford C., Washington, D. C.  
Reeves, Samuel W., III, Fort George G. Meade  
Richardson, Donald W., Washington, D. C.  
Richardson, Vaughn E., Willards  
Robinson, Charles H., Cardiff  
Sachs, Harold, Washington, D. C.  
Sadle, Alexander, Washington, D. C.  
Schwartz, Harry, Baltimore  
Shaffer, Betty B., Wilmington, Del.  
Sherrill, Elizabeth B., Sparks  
Sherwood, William T., Washington, D. C.  
Shewbridge, Benjamin B., Baltimore  
Smith, Charles E., Washington, D. C.  
Snyder, Roger W., Hagerstown  
Sokal, Mitchell, Brooklyn, N. Y.  
Spalding, Joseph P., Silver Spring  
Spruill, William T., Brandywine  
Staire, John R., Canonsburg, Pa.  
Stambaugh, Kenneth A., Baltimore  
Stein, Martin K., Baltimore  
Stevens, Evelyn M., Laurel  
Stonebraker, John E., Hagerstown  
Thies, William N., Washington, D. C.  
Thomas, Margaret G., Riverdale  
Thompson, Robert H., Washington, D. C.  
Tolker, Ethel B., Silver Spring  
Townsend, Mary E., Frostburg  
Towson, William O., Baltimore



Tunis, John O., Jr., Pompton Lakes, N. J.  
 Wahl, Carleton W., Silver Spring  
 Waldman, Sylvia R., Hyattsville  
 Watson, George B., Towson  
 Weis, Helen L., Baltimore  
 Wells, Robert L., Gaithersburg  
 Werner, Janet, Catonsville  
 White, Mary M., Dickerson  
 White, Robert P., Washington, D. C.  
 Whiton, Alfred C., Brentwood

#### SOPHOMORE CLASS

Aarons, Ralph, Baltimore  
 Adams, George D., Washington, D. C.  
 Aitcheson, William W., Berwyn  
 Albert, Milton J., Waterbury, Conn.  
 Aldridge, William A., Baltimore  
 Allen, George D., Takoma Park  
 Allen, John J., Hagerstown  
 Angelico, Arthur A., Brooklyn, N. Y.  
 Anspen, Harry D., Washington, D. C.  
 Anthony, Edwin R., Chestertown  
 Aring, Bernice C., Baltimore  
 Armiger, Virginia G., Annapolis  
 Auerbach, Lawrence W., Brooklyn, N. Y.  
 Badenhop, H. John, Baltimore  
 Balmer, Charles B., Lyndhurst, N. J.  
 Barthel, Robert A., Jr., Catonsville  
 Batch, Francis E., Hyattsville  
 Beers, John H., Washington, D. C.  
 Benbow, Robert P., Sparrows Point  
 Benjamin, Louis, Baltimore  
 Bernstein, Norman N., Washington, D. C.  
 Bishopp, Fred T., Silver Spring  
 Blalock, Georgia, Jonesboro, Ga.  
 Bloom, Morton I., Baltimore  
 Bonanno, Antonio C., Washington, D. C.  
 Bonnett, Howard G., Washington, D. C.  
 Borlik, Ralph, Washington, D. C.  
 Bowman, John D., Rockville  
 Bowman, Leonard C., Lucketts, Va.  
 Bowyer, Ernestine C., Washington, D. C.  
 Bradley, Robert J., Hyattsville  
 Brainerd, William F., III, Towson  
 Broadwater, Norman I., Oakland  
 Brockman, Carl L., Baltimore  
 Brookes, Thomas R., Jr., Bel Air  
 Bundick, William R., Baltimore  
 Byers, Lloyd D., Catonsville  
 Callow, Charles E., Mt. Rainier  
 Capossela, Thomas J., Washington, D. C.  
 Carpel, Albert J., Washington, D. C.  
 Cary, Charles G., Riverdale  
 Checket, Irene R., Baltimore  
 Chumbris, N. Angelos, Washington, D. C.  
 Chumbris, Cleom, Washington, D. C.  
 Clark, John T., Greensboro  
 Cleaver, William F., Washington, D. C.  
 Close, Horace W., Washington, D. C.  
 Clugston, Carolyn D., Chevy Chase  
 Coe, Paul M., Washington, D. C.

Wilson, Ruby E., Mt. Rainier  
 Wise, Paul S., Dover, Del.  
 Wohlstadter, Leonard, Brooklyn, N. Y.  
 Wojtczuk, John A., Baltimore  
 Wolf, John F., Hyattsville  
 Wolfe, Elizabeth L., Stephens City, Va.  
 Woll, Ephraim, Washington, D. C.  
 Wood, George F., Washington, D. C.  
 Young, Edmond G., Baltimore

Cohen, Harry, Baltimore  
 Cohen, Maxwell L., Washington, D. C.  
 Cole, William H., Towson  
 Collins, Roberta E., Hyattsville  
 Comer, Florence R., Hyattsville  
 Cooke, Alfred A., Hyattsville  
 Cornell, Ellner A., Brentwood  
 Crepea, Seymour B., Brooklyn, N. Y.  
 Crisafull, Joseph, Washington, D. C.  
 Crocker, L. Eleanor, Baltimore  
 Daneker, Million, Bel Air  
 Dantzig, Henry P., Hyattsville  
 Davidson, Oscar M., Baltimore  
 Davis, Harry L., Baltimore  
 Dieudonne, Erasmus L., Jr., Bladensburg  
 Dippel, Francis X., Baltimore  
 Dobres, Robert M., Baltimore  
 Domenici, Maurice R., Hagerstown  
 Edlavitch, Robert, Hyattsville  
 Eierman, George H. P., Baltimore  
 Evans, Lydia M., Chevy Chase  
 Faul, R. Virginia, Washington, D. C.  
 Feldman, Jack, Baltimore  
 Ford, John H., Baltimore  
 Foss, George E., Relay  
 Freemire, Elmer L., Takoma Park  
 Frey, Louis M., Mt. Rainier  
 Fuerst, Robert G., Hyattsville  
 Fulks, Moir M., Rockville  
 Ganzert, Mary L., Washington, D. C.  
 Gitomer, Harold A., Baltimore  
 Goldberg, Alvin, Brooklyn, N. Y.  
 Goldman, Gabriel, Baltimore  
 Goldman, Leon, Washington, D. C.  
 Gough, James J., Chaptico  
 Gram, Edith-Marie, Washington, D. C.  
 Grave de Peralta, Jose I., Camaguey, Cuba  
 Greenfield, Arthur, Yonkers, N. Y.  
 Grodjesk, Joseph E., Jersey City, N. J.  
 Groff, William, Jr., Owings Mills  
 Grotlich, Louise K., Silver Spring  
 Harcum, Bettie, Salisbury  
 Hardy, Jerome S., Silver Spring  
 Heaton, Charles C., Baltimore  
 Henderson, Adrienne M., Chevy Chase  
 Henry, Frances L., Washington, D. C.  
 Herbert, Joseph G., Washington, D. C.  
 Hirsch, Albert, Frederick  
 Hirsh, Harold L., Washington, D. C.

Honigman, Alvin H., Baltimore  
 Hoover, Lawrence G., Takoma Park  
 Hortman, William F., Jr., Washington, D. C.  
 Houck, Roland V., Vineland, N. J.  
 Hunter, Frances E., Chevy Chase  
 Hurley, John J., Landover  
 Hurley, Walter V., Jr., Hyattsville  
 Igartua, Jose E., Aguadilla, P. R.  
 Ireland, Julius W., Baltimore  
 Irwin, Robert C., Lyndhurst, N. J.  
 Isis, Philip S., Washington, D. C.  
 James, Helen M., Chevy Chase  
 Jarboe, James P., Bel Alton  
 Jett, Geraldine V., Chevy Chase  
 Johnson, Clifford E., Washington, D. C.  
 Johnson, Henry C., Washington, D. C.  
 Johnson, Vivian H., Baltimore  
 Jones, Lewis A., College Heights  
 Jones, Robert M., Baltimore  
 Joseph, David R., Stamford, Conn.  
 Kaplan, Solomon, Baltimore  
 Kardash, Theodore, Baltimore  
 Keefer, Ruth L., Takoma Park  
 Kelly, Thomas J., Jr., Bergenfield, N. J.  
 Kephart, Mary E., Taneytown  
 Keppler, Millicent M., Washington, D. C.  
 Kern, Richard E., Braddock Heights  
 King, James F., Baltimore  
 Kline, Horace F., Frederick  
 Kraemer, Edwin, Hackensack, N. J.  
 Kramer, Bernard, Baltimore  
 Krepp, Martin W., Jr., Baltimore  
 Krynitsky, John A., Chevy Chase  
 Kundahl, Paul C., Germantown  
 Ladson, Marcia, Rockville  
 Lang, G. Margaret, Passaic, N. J.  
 Lapidus, Stanley I., Baltimore  
 Lavine, Isidor M., Mt. Rainier  
 Lawder, Robert C., Havre de Grace  
 Ledoux, Landreville, Jr., Quantico, Va.  
 Levin, Harriett A., Baltimore  
 Levine, Ethel, Brooklyn, N. Y.  
 Levine, Milton, Baltimore  
 Lind, Thelma V., Washington, D. C.  
 Lipsitz, Benjamin, Baltimore  
 Liskey, Robert B., Hagerstown  
 MacDonald, Charles R., Cumberland  
 Maguire, John N., Wilmington, Del.  
 Maslin, Margaret L., Port Chester, N. Y.  
 Mattingly, Joseph A., Leonardtown  
 Mattoon, Laura I., Takoma Park  
 McCarthy, John J., Washington, D. C.  
 McClay, Harriette N., Hyattsville  
 McClayton, Meryl E., Baltimore  
 McFarlane, Samuel B., Jr., Lonaconing  
 McGinniss, Harry, Kensington  
 McGoogan, Malcolm T., Fitzgerald, Ga.

Mears, Frank D., Pocomoke  
 Mears, Thomas W., Washington, D. C.  
 Mehl, Joseph M., Jr., Washington, D. C.  
 Mellen, Luther E., Baltimore  
 Melnicove, Miriam N., Baltimore  
 Meng, Ralph H., Perry Point  
 Mermelstein, Daniel M., Baltimore  
 Michelson, Elaine P., Baltimore  
 Miller, J. William, Boonsboro  
 Miller, Walter L., Washington, D. C.  
 Mitchell, Alfred G., Baltimore  
 Morton, Helen C., Silesia  
 Nattans, Ralph A., Baltimore  
 Needle, Barnett M., Washington, D. C.  
 Neilson, Robert S., Jr., Baltimore  
 Neiman, Robert M., Mt. Vernon, N. Y.  
 O'Neill, Richard J., Baltimore  
 Orofino, Caesar F., New Rochelle, N. Y.  
 Oursler, Griffith S., Clinton  
 Page, John F., Baltimore  
 Panciotti, Michael E., Derby, Conn.  
 Parks, John A., Cumberland  
 Person, Gladys M., Chevy Chase  
 Phelps, William W., Upper Marlboro  
 Pickens, James L., Washington, D. C.  
 Piozet, Dolores A., Hyattsville  
 Pitzer, James E., Cumberland  
 Pollard, Kitty L., Baltimore  
 Prettyman, Dan T., Trappe  
 Price, Robert S., Catonsville  
 Rabinowitz, Alex, Brooklyn, N. Y.  
 Raisin, Herman S., Brooklyn, N. Y.  
 Reindollar, Helen L., Baltimore  
 Remsburg, Charles G., Berwyn  
 Robinson, Joseph M., Cardiff  
 Rockkind, Joseph M., Baltimore  
 Rochlin, Martin A., Baltimore  
 Rosen, Martin, Fort Salonga, N. Y.  
 Rosenstein, Louis N., Baltimore  
 Rouse, Edgar B., Baltimore  
 Sadowsky, Wallace H., North East  
 Samson, Elizabeth, Takoma Park  
 Schneider, Howard, Yonkers, N. Y.  
 Schneyer, Herbert, Ellicott City  
 Schrott, John D., Washington, D. C.  
 Schwartz, Norton B., Spring Valley, N. Y.  
 Schweitz, Edwin P., Washington, D. C.  
 Scott, Mary J., Hyattsville  
 Secrest, John P., Brentwood  
 Seitz, Charles E., Glen Rock, Pa.  
 Shaw, Edward L., Chevy Chase  
 Shegogue, Mac M., Landover  
 Shmuner, Daniel P., Baltimore  
 Simms, William G., Washington, D. C.  
 Simon, Fred L., Jr., Baltimore  
 Sollod, Leonard, Baltimore  
 Soule, Floyd A., Washington, D. C.  
 Stapf, Austin M., St. Denis



Stedman, Samuel F., Catonsville  
 Stegmaier, James G., Cumberland  
 Steinbach, Morton, Baltimore  
 Steinberger, Janet I., Baltimore  
 Stillings, Charles A., Baltimore  
 Stoddard, Sara L., Hyattsville  
 Stup, Charles R., Frederick  
 Sturchio, Lawrence E., Newark, N. J.  
 Thomas, Fred B., Washington, D. C.  
 Trundle, Lula S., Ashton  
 Turner, Katherine L., Washington, D. C.  
 Turner, Raymond E., Takoma Park  
 Updike, Edna M., Washington, Va.  
 Vadala, Eugene C., Baltimore  
 Waingold, George, Cumberland  
 Waite, Malden D., Odenton

#### FRESHMAN CLASS

Abbott, Betty B., Silver Spring  
 Abellera, Rulloda T., Riverdale  
 Abrams, David, Beckley, W. Va.  
 Acree, George W., Washington, D. C.  
 Adams, Donald L., Mt. Rainier  
 Aiello, Catherine C., Hyattsville  
 Albert, Earl A., Waterbury, Conn.  
 Almony, Ruth E., White Hall  
 Appelbaum, Bernard, Washington, D. C.  
 Armstrong William E., Washington, D. C.  
 Askin, Nathan, Baltimore  
 Asper, Guy P., Jr., Castle Point, N. Y.  
 Axtell, Harold A., Jr., Takoma Park  
 Baldwin, Agnes C., Berwyn  
 Ballard, Emilie M., Hyattsville  
 Barnes, Richard K., Jr., Sykesville  
 Barre, Lola B., Washington, D. C.  
 Barthel, William F., Catonsville  
 Bautista, Moises V., E. Riverdale  
 Bayuk, Robert J., Wyncote, Pa.  
 Beach, E. Elizabeth, Island Creek  
 Beamer, Francis X., Washington, D. C.  
 Becker, Bernard E., Crisfield  
 Becker, Elise I., Baltimore  
 Beksinski, Joan A., Baltimore  
 Bennett, Leonard J., Baltimore  
 Berlin, Walter I., Baltimore  
 Bernstein, Norman R., Washington, D. C.  
 Bever, John W., Berwyn  
 Birmingham, Michael J., Jr., Sparrows  
 Point  
 Biron, Bobbie, Salisbury  
 Blivess, Louis B., Baltimore  
 Blondet, Luis, Guayama, P. R.  
 Blum, Alice M., Baltimore  
 Blumenstein, Carl R., Washington, D. C.  
 Blundon, Kenneth E., Forest Glen  
 Bollinger, Phyllis G., Riverdale  
 Bond, Marian W., Washington, D. C.  
 Bond, William R., Halethorpe

Waters, Robert W., Princess Anne  
 Weinberg, Bernice R., Baltimore  
 Weinblatt, Mayer, Baltimore  
 Weiser, Theodore T., Brooklyn, N. Y.  
 West, Vernon E., Jr., Chevy Chase  
 Wharton, Edward M., College Park  
 Williamson, Martha L., Catonsville  
 Wilson, Thomas L., Havre de Grace  
 Wolf, Frances, Washington, D. C.  
 Woodwell, Lawrence A., Kensington  
 Wyatt, Henry F., Baltimore  
 Yockelson, Bernard A., Washington, D. C.  
 Young, Herbert S., Washington, D. C.  
 Young, Jerome L., Washington, D. C.  
 Zalesak, Francis J., College Park  
 Zimmerman, Loy M., Baltimore

Bono, Ann M., Washington, D. C.  
 Bono, Vivian E., Washington, D. C.  
 Borden, Burton D., Washington, D. C.  
 Borden, Paul, Washington, D. C.  
 Borradaile, Gilbert C., Laurel  
 Bothe, Henry C., Baltimore  
 Bowers, Leslie L., Washington, D. C.  
 Bowling, James E., Newport  
 Boyle, John B., Jr., Baltimore  
 Bragaw, Josephine M., Washington, D. C.  
 Branch, Hugh W., Washington, D. C.  
 Branch, William R., Washington, D. C.  
 Brazo, Frank A., Long Branch, N. J.  
 Brelsford, Jean R., Jr., Berwyn Heights  
 Brenner, Helene T., Baltimore  
 Brieger, Conrad V., Baltimore  
 Brinckerhoff, John S., Chevy Chase  
 Britton, Rose E., Washington, D. C.  
 Brooks, William R., Pikesville  
 Brown, Harriet R., Havre de Grace  
 Brown, John W., Bethesda  
 Brown, Robert S., Hazleton, Pa.  
 Brown, William E., Jr., Hampstead  
 Bryan, Mary C., Berwyn  
 Budmen, Bernard H., Atlantic City, N. J.  
 Burk, Joseph, Linthicum Heights  
 Burnham, Charles M., Owings Mills  
 Burns, Robert B., Havre de Grace  
 Burrage, Margaret D., Silver Spring  
 Busick, Doris L., Baltimore  
 Butler, Harry F., Cumberland  
 Buttner, John K., Baltimore  
 Caplan, Jerome E., Baltimore  
 Carey, Willis C., Jr., Salisbury  
 Carrico, Thomas C., Bryantown  
 Carroll, Dorothy M., Washington, D. C.  
 Carter, John F., Brookland, D. C.  
 Case, Richard W., Berwyn  
 Chaney, Jack W., Annapolis  
 Chaney, Robert J., College Park

Clagett, Samuel M., Baltimore  
 Clarke, Elizabeth S., Washington, D. C.  
 Clayman, Stanley, Washington, D. C.  
 Clifford, James L., Jr., Baltimore  
 Coale, Millard R., Baltimore  
 Cohen, Kenneth M., Baltimore  
 Cohen, Samuel, Washington, D. C.  
 Cole, William P., Towson  
 Coleman, Albert S., Washington, D. C.  
 Collison, Margaret, Takoma Park  
 Cook, H. Irvin, Hyattsville  
 Coombs, Albert H., Jr., Washington, D. C.  
 Corcoran, Martha A., Washington, D. C.  
 Covey, Carlton, Easton  
 Cronin, Charles T., Baltimore  
 Crump, Ralph F., Frostburg  
 Dahl, Arthur, Washington, D. C.  
 D'Alessandro, Gene L., Newark, N. J.  
 Danforth, F. Elaine, Baltimore  
 Daniels, Edward W., Baltimore  
 Davis, Aloyuise I., Havre de Grace  
 Davis, Virginia A., Washington, D. C.  
 Davis, W. Bruce, Silver Spring  
 Day, Hugh A., Berwyn  
 Dempsey, Harry J., Hyattsville  
 Dennis, Dottie C., Woodbury, N. J.  
 Dieffenbach, Albert W., Garrett Park  
 Dietle, Erwin, Silver Spring  
 Dietrich, Clayton A., Baltimore  
 Dillon, Harold, Baltimore  
 Dorfman, Sidney A., Washington, D. C.  
 Dorsey, Nathan G., Mount Airy  
 Douglas, Leslie C., Washington, D. C.  
 Dunie, Mack W., Baltimore  
 Dunkle, H. Bothwell, Maddox  
 Edmonds, William R., Baltimore  
 Edmonston, William C., Washington, D. C.  
 Ehrmantraut, John M., Brentwood  
 Elliott, Frances A., Washington, D. C.  
 Ellis, William E., Baltimore  
 Ensor, Joseph C., Cockeysville  
 Epperson, John W., Winona, W. Va.  
 Esmond, William G., Washington, D. C.  
 Ettin, Pearl, W. Englewood, N. J.  
 Eyler, Mervin S., Taneytown  
 Farkas, Robert W., York, Pa.  
 Fawcett, Howard H., Cumberland  
 Fernald, Llewellyn K., Washington, D. C.  
 Fetty, John H., Takoma Park  
 Finlayson, Thomas R., Bethesda  
 Finney, William R., Laurel  
 Fitzpatrick, Patricia C., Silver Spring  
 Flax, George L., Washington, D. C.  
 Fleischman, Beatrice, Washington, D. C.  
 Fradin, Melvin, Baltimore  
 France, Germanus J., Baltimore  
 Frazier, Lucille A., Takoma Park, D. C.  
 Freedman, Leona S., Baltimore  
 Fuller, Elizabeth C., Annapolis

Furbershaw, Olga S., Washington, D. C.  
 Gardner, William L., Jessup  
 Gatchell, Howell L., Baltimore  
 Gehman, Jonathan F., Brentwood  
 Gifford, John F., Washington, D. C.  
 Gile, John H., Washington, D. C.  
 Gisriel, Austin E., Elkridge  
 Glynn, Gwendolyn M., Stratford, Conn.  
 Goldberg, Bernard C., Baltimore  
 Goldsmith, Robert E., Baltimore  
 Goller, Carl, Baltimore  
 Goodrich, Edward E., Hyattsville  
 Goodwin, Muriel G., Baltimore  
 Gratz, Ezra B. A., Brooklyn, N. Y.  
 Graupner, Eleanor L., San Francisco,  
 Calif.  
 Green, Ruth E., Hyattsville  
 Greenwood, Judith K., Washington, D. C.  
 Grier, Jack G., Towson  
 Griffin, Margaret E., Baltimore  
 Griffith, Mary L., Takoma Park  
 Gross, Irving, Newark, N. J.  
 Groves, Anna B., Kennedyville  
 Hagan, William, Salisbury  
 Hall, Norma I., Chevy Chase  
 Hambleton, Harry B., Jr., Washington,  
 D. C.  
 Hammond, Irvin E., Catonsville  
 Hanson, William C., Jr., Washington, D. C.  
 Harlan, Edwin F., Riverdale  
 Harman, Bebe B., Baltimore  
 Harner, Charles R., Emmitsburg  
 Harrington, Mary J., Washington, D. C.  
 Harris, Irving J., Washington, D. C.  
 Harris, Joseph, Baltimore  
 Harris, Joseph R., Jr., Bethesda  
 Harrover, M. Elizabeth, Manassas, Va.  
 Hassett, John G., Washington, D. C.  
 Hayes, Donald A., Cumberland  
 Hayman, John B., Jr., Pocomoke  
 Healey, James W., Hagerstown  
 Hellstern, Charlotte M., Hudson Heights,  
 N. J.  
 Hellweg, Vincent P., Washington, D. C.  
 Hemphill, A. Leroy, Jr., Silver Spring  
 Hennies, Mary L., Chester, S. C.  
 Henning, John R., Washington, D. C.  
 Higbee, Lester W., Pleasantville, N. J.  
 Himelfarb, Norman H., Washington, D. C.  
 Hite, Dick, Baltimore  
 Hodson, Virginia E., Baltimore  
 Hohman, Gertrude E., Elkridge  
 Holt, Mary E., Washington, D. C.  
 Holzapfel, Norman M., Hagerstown  
 Houff, Clifford G., Washington, D. C.  
 Howe, Celeste M., Washington, D. C.  
 Hudak, Frank A., Baltimore  
 Huffer, Sarah V., Boonsboro  
 Hulshart, Ronald G., White Hall



Hunter, Mary E., Chevy Chase  
Hutchinson, Dick F., Chevy Chase  
Hutson, Paul G., Hagerstown  
Hutton, Carroll S., Baltimore  
Irvine, Ann H., Chicago, Ill.  
Jackson, Lorraine V., College Park  
Johnson, William H., Washington, D. C.  
Johnston, Margaret E., Washington, D. C.  
Jones, Rose I., College Park  
Jones, Willis R., Jr., Baltimore  
Kahn, Cyril, III, Brooklyn, N. Y.  
Karlinsky, Edythe, Baltimore  
Katz, Leonard R., Brooklyn, N. Y.  
Kaufman, Ethel J., Brooklyn, N. Y.  
Keagy, Rayburn W., Washington, D. C.  
Kefauver, Fred S., Middletown  
Kemper, James D., Washington, D. C.  
Kempton, Hildredth, Lanham  
Kendall, Charles W., Dundalk  
Kermisch, Arthur, Baltimore  
Kessler, Jane I., Washington, D. C.  
King, Elizabeth A., Washington, D. C.  
King, Vernon J., Odenton  
Kirschner, Eleanor, Camden, S. C.  
Klinefelter, William E. B., Baltimore  
Kling, Robert E., Jr., Riverdale  
Kloman, Winifred S., Washington, D. C.  
Koenig, Ruth E., Baltimore  
Koerner, John F., Sykesville  
Kornmann, Lucille V., Baltimore  
Kovitz, Armand, Baltimore  
Kraft, Fulton, Washington, D. C.  
Kraus, John W., Catonsville  
Kummer, Stanley T., Baltimore  
Kyle, John D., Frostburg  
Lake, Jacqueline R., Glen Burnie  
Lample, Gustav C., Jr., Baltimore  
Langford, Bertha M., Washington, D. C.  
Langmaid, C. Russell, Washington, D. C.  
Larduskey, James L., Jr., Baltimore  
Lawrence, George E., Hanover, Pa.  
Lawson, Frank W., Baltimore  
Lee, Richard M., Bethesda  
LeFrak, Samuel J., Brooklyn, N. Y.  
Lehman, Milton L., Baltimore  
Leister, Dick A., Washington, D. C.  
Leonard, James D., Chevy Chase  
Linthicum, Edgar L., Hale-h rpe  
Lipman, Harold, Baltimore  
Lipsky, Irving R., Washington, D. C.  
List, Leroy H., Baltimore  
Lloyd, Edward M., Washington, D. C.  
London, Wallace, Baltimore  
Long, James W., Washington, D. C.  
Long, Ruth E., Salisbury  
Ludwig, Joseph F., Washington, D. C.  
Macdonald, Maitland, Washington, D. C.  
MacLeod, Mary F., Washington, D. C.

Maddox, Franklin E., Jr., Glen Burnie  
Magid, Meyer, Port Chester, N. Y.  
Magruder, Ruth T., Washington, D. C.  
Markley, Robert R., Baltimore  
Marriott, Natalie, Washington, D. C.  
Martin, James A., Emmitsburg  
Matthews, Edward A., Baltimore  
McCaffrey, Robert W., Baltimore  
McCauley, Harry R., Jr., Baltimore  
McCeney, Henry C., Silver Spring  
McClure, Charles J. R., Baltimore  
McGinn, Vivian B., Baltimore  
McManus, William H., Berwyn  
Meakin, John L., Washington, D. C.  
Meenehan, M. Frank, Washington, D. C.  
Meginniss, Stephen M., Baltimore  
Meitzler, Elizabeth V., Washington, D. C.  
Meushaw, Arthur C., Jr., Severna Park  
Meyers, Melvin H., Hagerstown  
Millar, James R., Indian Head  
Miller, Robert J., Washington, D. C.  
Miller, Thomas V., Clinton  
Miller, William I., Baltimore  
Mintz, Milton D., Plainfield, N. J.  
MisKimon, Raymond M., Baltimore  
Mobley, Edward L., Hagerstown  
Mohle, Robert L., Berwyn  
Molesworth, Carlton, Jr., Frederick  
Mondorff, Pershing L., Emmitsburg  
Moore, Aurethia F., Cambridge  
Morris, Charles B., Delmar, Del.  
Morris, Henry L., Jr., Upper Marlboro  
Morris, William V., Hyattsville  
Mueller, John L., Baltimore  
Multz, Benjamin S., Capitol Heights  
Murphy, John R., Washington, D. C.  
Myers, Paul F., Chevy Chase  
Nechamkin, Isadore, Baltimore  
Nelson, Andrew J., White Hall  
Newberry, John A., Baltimore  
Newell, Robert T., Jr., Centreville  
Nichols, Lee H., Washington, D. C.  
Nigro, James, Fort George G. Meade  
Nimetz, David, Washington, D. C.  
Noble, Charles M., Fairmount  
Norman, Richard E., Hyattsville  
Oppenheimer, Beverly C., Brooklyn, N. Y.  
Ostrow, Gertrude D., Washington, D. C.  
Oswald, William B. Catonsville  
Owens, Dorothy D., Davidsonville  
Palmer, Carroll F., Washington, D. C.  
Papanicolas, James J., Washington, D. C.  
Parks, Joseph A., Bethesda  
Parvis, Charles F., Baltimore  
Paterson, Bess L., Towson  
Payne, Frances E., Landover  
Peregoff, Arthur, Frederick

Phillips, Jay M., Baltimore  
Pinas, Samuel R., Baltimore  
Piozet, Charles F., Hyattsville  
Pollack, Ethel, Baltimore  
Popham, William F., Edgewater  
Porter, Robert L., Ellerslie  
Powell, Alwyn M., Baltimore  
Preble, Merle P., Fort Washington  
Prescott, Stedman, Jr., Rockville  
Prinz, John W., Jr., Baltimore  
Pruitt, Jessie I., Takoma Park  
Pyle, Mary E., Frederick  
Rabak, Richard W., Washington, D. C.  
Randall, Charles H., Washington, D. C.  
Raphel, Eugene V., Cumberland  
Ray, Enos, Fair Haven  
Reese, Elizabeth J., Washington, D. C.  
Rice, Helen F., Baltimore  
Riedel, Kathryn E., Hyattsville  
Rieg, Mary, Washington, D. C.  
Riehl, Frederick K., Baltimore  
Ringwald, Owen E., Hyattsville  
Robie, William A., Billingsley  
Roesler, Herbert S., Bayard, Va.  
Rogers, Jerome S., Jr., Bethesda  
Rogoff, Sidney, Nutley, N. J.  
Roper, Catherine B., Norfolk, Va.  
Rosen, Bernard L., Baltimore  
Rosenbaum, Joseph, Baltimore  
Rosenbloom, Harry, Washington, D. C.  
Row, Linwood P., Hagerstown  
Rowe, William B., Jr., Washington, D. C.  
St. Clair, Betty D., College Park  
Salawitch, Mildred B., Baltimore  
Saulsbury, Gove L., Riverdale  
Scarborough, Rowan L., Silver Spring  
Scates, Charles E., Washington, D. C.  
Schaufele, Walter J., Fullerton  
Schenker, Samuel, Annapolis  
Schlesinger, Arthur, Washington, D. C.  
Schoolfield, Nancy C., Pocomoke  
Schwarz, John T., Sparrows Point  
Scott, Tillman C., Mt. Rainier  
Seidel, David L., Takoma Park  
Sesso, Raymond F., Washington, D. C.  
Seymour, George, Jr., Washington, D. C.  
Shelton, John A., Chevy Chase  
Sheriff, Roger E., Landover  
Sherman, N. M. Berwyn, Mt. Rainier  
Shoals, Robert N., Catonsville  
Short, Katharine E., College Park  
Siegel, Leo H., Nutley, N. J.  
Silberg, I. Walter, Baltimore  
Silverman, William J., Baltimore  
Silverstein, David, Belmar, N. J.  
Simpson, Doris V., Hagerstown  
Simpson, Mary E., Trappe  
Sindler, Millard S., Baltimore

Singer, Milton E., Baltimore  
Skotnicki, Frank J., W. Hazelton, Pa.  
Slattery, Richard G., Chevy Chase, D. C.  
Smith, Edward A., Washington, D. C.  
Smith, Edward W., Jr., Baltimore  
Smith, John T., Rockville  
Smith, Tom L., Baltimore  
Snow, John W., Washington, D. C.  
Snyder, Eleanor S., Baltimore  
Souder, William H., Washington, D. C.  
Spadola, Joseph W., Morristown, N. J.  
Speaker, Robert J., Washington, D. C.  
Springer, Earl V., Hagerstown  
Steinberg, Douglas S., College Park  
Sterling, Harold, Washington, D. C.  
Sterling, James T., Washington, D. C.  
Stern, Harry W., Washington, D. C.  
Stetson, Frank, Jr., Chevy Chase  
Stoddart, Adam T., Baltimore  
Stouffer, Frances J., Hagerstown  
Strachan, Lincoln S., Kitzmiller  
Stringer, John T., Baltimore  
Talcott, Worthington H., Washington, D. C.  
Taylor, T. Guy, Baltimore  
Tenny, Morgan L., Garrett Park  
Terl, Armand, Baltimore  
Thompson, Franklin L., Washington, D. C.  
Tiller, Richard E., Washington, D. C.  
Tobias, Jane E., Washington, D. C.  
Toomey, Edna P., Bladensburg  
Truman, Zelma M., College Park  
Tyser, Ralph J., Baltimore  
Usuda, Charles T., Bethesda  
Vaiden, Sara A., Baltimore  
Van Horn, John M., Glenn Dale  
Viel, Fred J., Aberdeen  
Wade, John P., Jr., Washington, D. C.  
Wailles, Dorothea A., Baltimore  
Walker, Andrew J., Washington, D. C.  
Walmsley, John S., Baltimore  
Walterman, Edward, Greenfield, N. Y.  
Warfield, Mary D., College Park  
Waters, William R., Lanham  
Watson, William W., Baltimore  
Wehmhoff, Bruce M., Washington, D. C.  
Weinman, Melvin, Baltimore  
Weinstein, David, Washington, D. C.  
West, William V., Chevy Chase  
Whedon, Paul, Washington, D. C.  
White, David G., Lanham  
White, Jack S., Hartford, Conn.  
White, J. Gordon, Baltimore  
Williams, Don H., Washington, D. C.  
Wilson, Stansbury M., Baltimore  
Wise, Gabrielle D., Relay  
Witsell, Edward F., Brookline, Mass.  
Witzke, Harry H., Baltimore



Witzke, Leroy M., Baltimore  
 Woollen, Elizabeth W., Lothian  
 Worgan, David K., Luke  
 Young, Elton F., Washington, D. C.

Zeller, C. Doris, Baltimore  
 Zilber, Morris L., Baltimore  
 Zurhorst, Mary O., Washington, D. C.  
 Zweig, Oscar, Washington, D. C.

#### UNCLASSIFIED AND PART TIME

Bollinger, Gladys G., College Park  
 Campbell, Gordon H., Washington, D. C.  
 Choucleris, Helen E., Winchester, Va.  
 Compton, Beulah C., Arlington, Va.  
 Cox, James S., Silver Spring  
 Crowley, Mary C., Chicago, Ill.  
 Dowd, Robert T., Chevy Chase  
 Hayman, Harry G., Jr., Salisbury  
 Hoffman, Mary J., Relay

Holmes, Mabelle, College Park  
 Lemmermann, Henry J., College Park  
 Lloyd, Eugene K., Jr., Rock Point  
 Mentis, Anthony P., Baltimore  
 Ross, Barbara G., Washington, D. C.  
 Schiff, Adelaide S., Allentown, Pa.  
 Vaught, Jeannette, Hyattsville  
 Waite, Alan K., College Park.  
 Williams, Arthur E., Jr., Salisbury

#### EXTENSION CLASSES

##### ANNAPOLIS

Backer, A. K.  
 Boteler, George W.  
 Brady, Margaret E.  
 Carr, Clayton  
 Dimaggio, Albino M.  
 Fenton, Lois V.  
 Fuller, F. Peyton  
 Galloway, John  
 Geraci, Alvin J.  
 Hoban, Charles J.  
 Hopkins, M. Fawcett  
 Ingersoll, Robert W.  
 Jones, I. Burkley, III  
 Kerr, Charles

Kuchar, Helen  
 Lacey, William J.  
 McNew, Walter H.  
 Meekins, Marjorie F.  
 Mitchell, Philip E.  
 Musterman, Andrew J.  
 Peach, J. Compton  
 Pettebone, Amy R.  
 Russell, Elmer  
 Saumenig, William E.  
 Skoch, George H.  
 Woodward, Henry  
 Worthington, Robert K.  
 Zerhusen, Henry, Jr.

##### CAMBRIDGE

Applegarth, Geneva  
 Brooks, Hattie  
 Cheezum, Lillian  
 Covington, Antoinette  
 Gore, Elizabeth  
 Graney, Jane M.  
 Hankins, Margaret  
 Hirst, Elizabeth  
 Hooper, Granville  
 Hutchison, Stella  
 Jacobson, Gertrude  
 Jones, Neva  
 Leonard, Clara B.  
 Leonard, Katherine

Leonard, Norma  
 Lowry, Guy D.  
 Lowry, Mrs. Guy  
 McKnight, William  
 Meekins, Scott  
 Moore, Evelyn V.  
 Moore, Medora  
 Mulliken, Isabelle  
 Shinn, Virginia  
 Taylor, Ernestine  
 Travers, H. A.  
 Turner, Kathleen  
 Windsor, R.  
 Wood, J. Arthur

## SCHOOL OF DENTISTRY

### SENIOR CLASS

Aks, Harry, Norfolk, Va.  
 Barsky, Sol, Washington, D. C.  
 Beetham, Curtis M., Baltimore  
 Berkowitz, Bernard R., Baltimore  
 Berman, Irving, New Haven, Conn.  
 Burton, Wilbur D., Jr., Dover, Del.  
 Byer, Joseph, Trenton, N. J.  
 Caputo, Anthony V., Newark, N. J.  
 Casey, William R., Pawtucket, R. I.  
 Clewlow, Albert T., Atlantic City, N. J.  
 Colby, Maurice R., Long Branch, N. J.  
 Davis, Henry, Baltimore  
 Davis, Mark O., Jr., Washington, D. C.  
 Downes, Kenneth F., Hartford, Conn.  
 Downs, Joseph L., Jersey City, N. J.  
 Eamich, Richard J., Washington, D. C.  
 Edwards, Melvin F., Belford, N. J.  
 Finkelstein, Louis B., Newark, N. J.  
 Fox, Isadore E., Atlantic City, N. J.  
 Friedberg, Herbert, Atlantic City, N. J.  
 Fulmer, James A., Fountain Inn, S. C.  
 Gare, Morris R., Newark, N. J.  
 Gaudreau, Raymond J., Saylesville, R. I.  
 Glick, George H., Passaic, N. J.  
 Greenberg, Jesse, Brooklyn, N. Y.  
 Gregoire, Gaetan G., Moosup, Conn.  
 Heck, John C., Baltimore  
 Heuser, Victor L., Glen Ridge, N. J.  
 Hirshorn, Abraham, Camden, N. J.  
 Jacobs, Vivian M. J., Harrison, N. J.  
 Jones, Donald B. B., Takoma Park  
 Kanelos, Peter T., Providence, R. I.  
 Kuperstein, Charles B., Philadelphia, Penna.  
 Lavine, Harold H., Mt. Rainier  
 Leonard, Melvin R., Chincoteague, Va.  
 Lessow, Harold J., Hartford, Conn.

Levin, David A., Baltimore  
 Levitas, Guilford, Westwood, N. J.  
 Lewis, Bernard M., Washington, D. C.  
 Lubarsky, Milton S., Philadelphia, Penna.  
 Markos, Simon G., Dover, N. H.  
 Miksinski, Boleslaw W., Jr., Baltimore.  
 Miller, Robert G., Catonsville  
 Mirabella, Joseph, Jr., Newark, N. J.  
 Moorefield, Paul B., Mt. Airy, N. C.  
 Myers, Ernest L., Frederick.  
 Nacrelli, Chris A., Jr., Marcus Hook, Penna.  
 Poster, Benjamin L., Baltimore  
 Pugh, Gordon S., Baltimore  
 Ralph, Joseph E., Keyport, N. J.  
 Reed, Robert A., Milford, Delaware  
 Reilly, Bernard H., Central Aguirre, Puerto Rico  
 Reynolds, Jotham G., Waterbury, Conn.  
 Richardson, Richard E., Leaksville, N. C.  
 Riffin, Harry E., Crisfield  
 Roh, Frank J., Baltimore  
 Rosen, Irving, Baltimore  
 Salvatore, Joseph Z., Bristol, Conn.  
 Seidler, Alonzo L., Towson  
 Shobin, Jack, Baltimore  
 Shure, Maurice D., New Haven, Conn.  
 Silverstein, William H., Woodcliff, N. J.  
 Simington, William B., Danville, Penna.  
 Simon, Morris D., Clifton, N. J.  
 Sloan, Isaac, Dunbar, W. Va.  
 Swinehart, Darwin R., Baltimore  
 Sydney, Elmer L., Providence, R. I.  
 Yoffe, Gilbert, Baltimore  
 Zeiner, Raymond E., Torrington, Conn.  
 Zerdy, Alfonse W., New Philadelphia, Penna.

### JUNIOR CLASS

Aaron, Alvin, Biddeford, Maine  
 Asbell, Milton B., Camden, N. J.  
 Bailey, Carl E., Baltimore  
 Baker, Edward K., Jr., Pikesville  
 Barker, John P., Laurel  
 Barnes, Bradley B., Maplewood, N. J.  
 Boro, Alex L., Severna Park  
 Bozzuto, John M., Jr., Waterbury, Conn.  
 Cabler, James T., Baltimore  
 Cammarano, Frank P., New Haven, Conn.  
 Carrigan, Harold J., Jersey City, N. J.  
 Cohen, Sigmund, Baltimore  
 Connell, Edward W., Norwich, Conn.

Cooper, David, Atlantic City, N. J.  
 Cramer, Paul E., Monessen, Penna.  
 Cruik, Edwin D., Poolesville  
 Donofrio, Richard S., Danbury, Conn.  
 DuBoff, Leonard, Hartford, Conn.  
 Erlich, William, Baltimore.  
 Eskow, Alexander B., Perth Amboy, N. J.  
 Falk, Wilbur N., Branford, Conn.  
 Farrington, Charles C., Chelmsford, Mass.  
 Finegold, Raymond, Belmar, N. J.  
 Gemski, Henry J., New Haven, Conn.  
 Giuditta, Nicholas A., Westfield, N. J.  
 Goe, Reed T., Weston, W. Va.



Habercam, Julian W., Baltimore  
 Haggerty, Jack S., Sussex, N. J.  
 Hartwell, Perley B., Jr., St. Johnsbury, Vt.  
 Heil, Roland W., Baltimore  
 Johnson, William B., Jr., Annapolis  
 Johnston, Arthur J., Providence, R. I.  
 Jonas, Charles S., Atlantic City, N. J.  
 Joyce, Osler C., Arnold  
 Kern, Louis D., Baltimore  
 Kraus, George C., Baltimore  
 Lasley, Frank A., Jr., Staunton, Va.  
 Lau, Irvin M., Jr., York, Penna.  
 Levin, Leonard L., Norfolk, Va.  
 Liberman, Sidney E., Baltimore  
 Lyon, Eugene D., Baltimore  
 Margulies, David B., Linden, N. J.  
 Marsh, Edmond F., North Adams, Mass.  
 Massucco, Lawrence P., Bellows Falls, Vt.  
 Mathias, Craig P., Waynesboro, Penna.  
 McCausland, Charles P., Baltimore  
 McLean, Harry, Cumberland  
 McMillin, Clarence V., Spartanburg, S. C.

#### SOPHOMORE CLASS

Aaronson, Fabius F., Washington, D. C.  
 Allen, Joseph P., New Martinsville,  
 W. Va.  
 Auerbach, Bernard B., Baltimore  
 Barsamian, Samuel, Providence, R. I.  
 Blais, Raymond, Holyoke, Mass.  
 Blevins, George C., Centreville  
 Brown, Frank A., Lansdowne  
 Cannaday, Henry L., Roanoke, Va.  
 Carvalho, Antone R., New Bedford, Mass.  
 Cavallaro, Ralph C., Branford, Conn.  
 Chan-Pong, Bertrand O., Port-of-Spain,  
 B. W. I.  
 Davis, James C., Silver Spring  
 Dunn, Naomi A., New Britain, Conn.  
 Edgar, Benjamin D., Viola, Ill.  
 Eichenbaum, Irving W., New Haven,  
 Conn.  
 Fallon, Charles H., Trenton, N. J.  
 Feindt, William B., Baltimore  
 Francis, Garnet P., Jr., Alexandria, Va.  
 Gane, Eugene M., Hartford, Conn.  
 Gilden, Paul, Baltimore  
 Goldstein, Leonard N., Hartford, Conn.  
 Gorsuch, Gilbert F., Sparrows Point  
 Griesbach, Hans H., Naugatuck, Conn.  
 Grove, Harry C., Jr., Fairplay  
 Hirschman, Leonard M., Baltimore  
 Hoffacker, Henry J., Hanover, Penna.  
 Jacoby, Robert E., Halethorpe.  
 Jakob, Robert, Norwalk, Conn.  
 James, Verda E., Milford, Del.  
 Johnson, Walter E., Berlin, N. H.  
 Kader, Marshall I., Baltimore

Meadows, Stanley J., Brunswick  
 Mendelsohn, Harry B., Norfolk, Va.  
 Messner, Jack M., Washington, D. C.  
 Morris, Hugh B., Baltimore  
 Muller, Edward J., Jersey City, N. J.  
 Myer, Edward H., Jr., Mahwah, N. J.  
 Neal, Floyd W., Southington, Conn.  
 Rich, Otto M., New Brunswick, N. J.  
 Roitman, Irvin, Mercer, N. J.  
 Ryan, William H., Frostburg  
 Saltman, David, Holyoke, Mass.  
 Silverman, Stanley G., Portsmouth, Va.  
 Slavinsky, Edwin A., Baltimore  
 Smyth, Lawrence C., Quincy, Mass.  
 Stepan, Jerry J., Baltimore  
 Stewart, Ford A., Baltimore  
 Theodore, Raymond M., Baltimore  
 Turok, Seymour, Passaic, N. J.  
 Weigel, Sterling J., York, Penna.  
 Westerberg, Carl V., Simsbury, Conn.  
 Wheeler, Elias O., Lynchburg, Va.  
 Williams, Ernest V., Washington, D. C.

Krug, Frederick R., Baltimore  
 Labasauckas, Charles F., Watertown, Conn.  
 Legum, Isidore, Baltimore  
 Maislen, Irving L., Hartford, Conn.  
 McConnell, William L., West Union,  
 W. Va.  
 McCracken, Jules, Cameron, W. Va.  
 Meinster, Leon H., Baltimore  
 Melson, William F., Wilmington, Del.  
 Miller, Max, Baltimore  
 Morris, Albert W., Salisbury  
 Myers, Melvin, Washington, D. C.  
 Noon, William J., Jr., Providence, R. I.  
 Plaster, Harold E., Winston-Salem, N. C.  
 Rabinowitz, Seymour A., New Britain,  
 Conn.  
 Randolph, Kenneth V., Lost Creek,  
 W. Va.  
 Reed, Paul, Port Henry, N. Y.  
 Robinovitz, Irving K., Fall River, Mass.  
 Rogers, Everett T., Waterbury, Conn.  
 Schoepke, Oscar J., Oakfield, Wis.  
 Schriver, Alfred B., Bangor, Me.  
 Shaudis, Leo J., Silver Creek, Penna.  
 Shea, Erwin E., Hartford, Conn.  
 Sidoti, Vincent F., Winsted, Conn.  
 Stinebert, Edward R., Baltimore  
 Tinsley, William C., Lynchburg, Va.  
 Tipton, Dorsey R., Baltimore  
 Varipatis, Michael S., Baltimore  
 Waldman, Bernard, New Haven, Conn.  
 Weiner, Irving S., Hartford, Conn..  
 Wooden, John H., Jr., Baltimore  
 Wright, Dan., Greenville, N. C.

#### FRESHMAN CLASS

Belinkoff, Sidney A., Weehawken, N. J.  
 Bonham, John T., Charleston, W. Va.  
 Bookstaver, Julian B., Teaneck, N. J.  
 Dabrowski, Benjamin A., Baltimore  
 Diamond, Ben, Roanoke, Va.  
 Goldhaber, Samuel, Flushing, N. Y.  
 Ivrey, Samuel M., Annapolis  
 Kasawich, Julius I., Whitestone, N. Y.  
 Litchman, Burton, Cranston, R. I.

Lowander, George A., Jr., Queens Village,  
 N. Y.  
 Page, John H., Larchmont, N. Y.  
 Pessagno, Eugene L., Jr., Baltimore  
 Piccolo, James A., New Haven, Conn.  
 Randman, Bernard, Whitestone, N. Y.  
 Reposo-Ruiz, Mario L., Havana, Cuba  
 Westcott, Horace L., Branford, Conn.  
 Yablonski, Anthony P., Simsbury, Conn.

#### SECOND YEAR PREEDENTAL CLASS

Beaven, Sterrett P., Baltimore  
 Berman, Daniel E., Baltimore  
 Betts, Robert L., Morris Plains, N. J.  
 Briskin, Melvin R., Springfield, Mass.  
 Caldwell, Gilbert L., Baltimore  
 Chmar, Phillip L., Rockville  
 Cohen, Jerome S., Baltimore  
 Dubansky, Paul S., Baltimore  
 Farrell, Lawrence D., Norwich, Conn.  
 Frey, Donald T., Catonsville  
 Hewitt, Earl C., Baltimore  
 Klingelhofer, Herbert E., Baltimore

Lawrence, Ronald, Elk Mills  
 Link, Etta C., Halethorpe  
 Mayes, Irvin C., Jr., Timonium  
 McClees, Joseph G., Baltimore  
 McDaniel, Edward P., Jr., Jarrettsville  
 Rudo, Frederick B., Raspeburg  
 Schultheis, Carl H., Baltimore  
 Smith, Bernard, Hagerstown  
 Storch, Murray, Passaic, N. J.  
 Towson, Donald H., Dundalk  
 Wohl, Milton, Baltimore  
 Zuskin, Raynard F., Baltimore

#### FIRST YEAR PREEDENTAL CLASS

Benfer, Vernon B., Marysville, Penna.  
 Cohen, Sylvan P., Baltimore  
 Coroso, Joseph T., Jr., Hartford, Conn.  
 Fricke, Annamarie H., Baltimore  
 Gasteazoro-Rodriguez, Mariano, Panama  
 City, Rep. of Panama  
 Harber, Joseph M., Asbury Park, N. J.  
 Kahl, Gordon K., Baltimore  
 Kolman, Irvin O., Trenton, N. J.  
 Lasch, Henry R., New Britain, Conn.  
 Lazauskas, Algert P., Baltimore  
 Markowitz, Howard M., Baltimore  
 Martinelli, Ricardo, Panama City, Rep. of  
 Panama  
 Munoz, Jorge E., Salinas, Puerto Rico

Ouellette, Raymond T., Lawrence, Mass.  
 Ramirez, Acosta Mario F., San German,  
 Puerto Rico  
 Riha, Richard K., Baltimore  
 Sands, Douglas H., Baltimore  
 Sanner, James H., Phoenix  
 Scherr, Herman, Baltimore  
 Solled, Norman, Baltimore  
 Sumner, Cleff O., Fullerton  
 Tighe, Joseph M., Raspeburg  
 Toomey, Lewis C., Jr., Elkridge  
 Wieland, John T., Baltimore  
 Wilds, Howard F., Baltimore  
 Williamson, Riley S., Baltimore  
 Yeager, John W., Baltimore

#### SPECIAL STUDENTS

Schilling, Mary E., Baltimore

#### COLLEGE OF EDUCATION

##### SENIOR CLASS

Barnsley, Jean, Rockville  
 Bayley, John S., Baltimore  
 Bell, Edith U., Williamsport  
 Berman, Bertrand S., Baltimore  
 Bonner, Anna B., Hyattsville  
 Bowen, Gertrude E., Bennings, D. C.

Bradford, Evelyn M., Towson  
 Brown, Elizabeth D., Washington, D. C.  
 Buhrow, Viola M., Washington, D. C.  
 Burtner, Rosemary J., Boonsboro  
 Cartee, Janet L., Hagerstown  
 Chatham, Jeanette F., Salisbury



Cochran, A. Mildred, Takoma Park  
 Crisp, Mary B., Baltimore.  
 Curran, Betty, Washington, D. C.  
 Dantzig, Anna S., Baltimore  
 Davis, Robert E., Washington, D. C.  
 Elmore, Edna E., Gastonia, N. C.  
 Esch, Marion E., Chevy Chase  
 Farrell, Albert B., Washington, D. C.  
 Fatkin, Marshall W., Luke  
 Forsyth, Blanche E., Friendsville  
 Gretz, Harry B., Washington, D. C.  
 Higgins, Marjorie A., Hurlock  
 Humelsine, Carlisle H., Hagerstown  
 Kreiter, Ruth, Washington, D. C.  
 Laws, Lucile V., Silver Spring  
 Lee, Marion, Washington, D. C.  
 Lightfoot, Georgiana C., Takoma Park.  
 Lombardo, Michael A., Newark, N. J.  
 Lugar, Charles E., Hagerstown  
 Melchior, Donald F., Baltimore  
 Minker, Dorothy, Washington, D. C.  
 Murphy, Angela B., Cumberland  
 Nordeen, Eleanor C., Mt. Rainer  
 Norris, Elizabeth M., Washington, D. C.  
 Parker, Harry E., Jr., East New Market  
 Pence, Mary, Conway, Ark.  
 Pfeiffer, Paul E., Annapolis

#### JUNIOR CLASS

Beal, Anne A., Washington, D. C.  
 Birkland, John V., Washington, D. C.  
 Bond, Donald B., Reisterstown  
 Boyd, Anna G., Olney  
 Brode, Carl K., Frostburg  
 Conway, Mary V., Washington, D. C.  
 Danforth, Shirley F., Riverdale  
 Dominek, Mary R., College Park  
 Doub, June B., Hagerstown  
 DuBrow, Rita, Newark, N. J.  
 Enderle, Ethel E., Glen Burnie  
 Freas, Gordon K., Wheaton  
 Fuss, Lucille A., Hagerstown  
 Goldsmith, Cecelia E., La Plata  
 Gomborov, Minnie, Baltimore  
 Hall, Thomas W., Bel Air  
 Hamilton, Isabel, Hyattsville  
 Hammett, James T., Leonardtown  
 Harlan, Doris E., Silver Spring  
 Harryman, Thomas D., Baltimore  
 Headley, L. Coleman, College Park  
 Heaps, Laura F., Cardiff  
 Heaps, Mary M., Cardiff  
 Heffernan, Maryelene, Washington, D. C.  
 Hobbs, Dorothy M., Linden  
 Jack, Margaret C., Rowlandville  
 Jimmyer, John K., Baltimore  
 Katz, Lillian, Washington, D. C.

Phillips, Phyllis R., E. Orange, N. J.  
 Polack, Samuel J., Hagerstown  
 Pultz, Kathryn E., Takoma Park  
 Pusey, James F., Delmar, Del.  
 Resnitsky, Isabel E., Jersey City, N. J.  
 Roby, Maud F., Riverdale  
 Ryan, Michael J., Washington, D. C.  
 Schwartz, Mortimer, New York, N. Y.  
 Scop, Abraham, Catonsville  
 Smith, S. Margaret, Bel Air  
 Solliday, Alice J., Blue Ridge Summit, Pa.  
 Stalfort, Carl G., Baltimore  
 Stratmann, Elsie A., Sparrows Point  
 Sudler, Olive W., Baltimore  
 Sugar, Beatrice, St. Pauls, N. C.  
 Swanson, Harry R., Washington, D. C.  
 Sween, Lorna L., Frostburg  
 Talcott, Lois L., Washington, D. C.  
 Tarbett, Clara M., Takoma Park  
 Teal, Dorcas R., Hyattsville  
 Weaver, Ella K., Ellicott City  
 Williams, Margaret, Silver Spring  
 Yaeger, Charles F., Jr., Baltimore  
 Young, Carolyn R., Clintonville, Conn.  
 Zimmerman, James F., Frederick  
 Zulick, Charles M., Houtzdale, Pa.

Keller, Ralph W., Frederick  
 Kellermann, Eileen A., Hyattsville  
 Krumpach, Mary E., Luke  
 Lee, Frank D., Baltimore  
 Long, Elsie G., Marion  
 Lovell, Grace R., Brentwood  
 Lowry, Ruth V., Baltimore  
 Marriott, Margaret, Washington, D. C.  
 Maxwell, Edna C., Luke  
 Mazer, Robert, Baltimore  
 McCleskey, Benjamin C., Washington, D. C.  
 McNaughton, Edwina B., Washington, D. C.  
 Miller, Aden T., Lonaconing  
 Moore, Elizabeth A., Queen Anne  
 Morgan, Alice S., Washington, D. C.  
 O'Keefe, Bernice E., Rockville  
 Pahlman, Margaret B., Easton  
 Polack, Bella R., Hagerstown  
 Powell, Dorothy M., Dorsey  
 Reuling, Leonard R., Baltimore  
 Robinson, Grace E., Baltimore  
 Shamberger, Ruth C., Baltimore  
 Shearer, Kathleen M., Baltimore  
 Sheridan, Richard B., Jr., Salisbury  
 Shipley, Cora L., Branchville  
 Sinclair, Dorothy L., Washington, D. C.

Smith, Ruth R., Washington, D. C.  
 Snyder, Faye D., Annapolis  
 Sullivan, Ross H., Pleasantville, N. J.  
 Surgent, Michael G., Eckley, Pa.  
 Swanson, Margaret E., Washington, D. C.  
 Vaught, Valerie V., Riverdale

#### SOPHOMORE CLASS

Adams, Clifton L., Silver Spring  
 Alperstein, Benjamin, Baltimore  
 Anders, Anne F., Frederick  
 Aud, William E., Poolesville  
 Ayers, Alice J., Barton  
 Biskin, Shirley L., Takoma Park  
 Bohlin, Mary H., Washington, D. C.  
 Boose, Dorothy M., Washington, D. C.  
 Bowling, Thelma P., Faulkner  
 Bowling, Virginia P., Wicomico  
 Bowman, Anna K., Annapolis Junction  
 Bowman, Streett W., Aberdeen  
 Brinckerhoff, Mary L., Chevy Chase  
 Burton, Beulah M., Washington, D. C.  
 Byers, George E., Lonaconing  
 Case, Sara V., Felton, Del.  
 Coffey, Lillian S., Landover  
 Cronin, Frank H., Joppa  
 Cutting, Maude, Washington, D. C.  
 Dotterer, Jacklyn S., Chevy Chase  
 DuShane, Doris A., Baltimore  
 Eichlin, Doris E., Washington, D. C.  
 Forker, Jessie M., Brooklyn, N. Y.  
 Forman, Morris, Baltimore  
 Fowble, Florence W., Reisterstown  
 Garman, Helen M., Washington, D. C.  
 Garrott, M. Virginia, Knoxville  
 Goldberg, Helen E., Kingston, N. Y.  
 Grove, Georgia L., Washington, D. C.  
 Handler, Sylvia, Kingston, N. Y.  
 Hardesty, Anna M., Newburg  
 Howard, William F., Baltimore

Weisberg, Bertha, Baltimore  
 Weller, Lucille B., Beallsville  
 Wheeler, Elwood L., Glyndon  
 Wilson, Ruth E., Washington, D. C.  
 Wiser, Vivian D., Branchville  
 Wolfe, William C., Mt. Union, Pa.

Huber, Nora L., Baltimore  
 Iager, Helen L., Hyattsville  
 Knepley, George W., Altoona, Pa.  
 Kuhn, Eleanor M., Bethesda  
 Lowen, Alsace L., Hyattsville  
 Males, Alexander E., Pittsburgh, Pa.  
 Manning, Laura, Silver Spring  
 Mayes, Marian V., Phoenix  
 McChesney, Douglas W., University Park  
 Meade, James G., Port Deposit  
 Mileto, Catherine, Annapolis  
 Morris, J. Burton, Port Deposit  
 Murphy, Celia E., Walkersville  
 Nevy, Inez A., Cumberland  
 Peterson, Olga C., Hyattsville  
 Rawley, Betty E., Hyattsville  
 Scharf, Thomas M., Glen Burnie  
 Schutz, Patricia B., Annapolis  
 Smith, Blair H., Mt. Rainier  
 Smith, Elizabeth J., Salisbury  
 Smith, Mildred E., Walkersville  
 Sparling, Edith R., Washington, D. C.  
 Sullivan, Evelyn L., Hyattsville  
 Tetlow, Robert M., Boyds  
 Townsend, Frances J., Riverdale  
 Trundle, Lucy W., Ashton  
 Walsh, Ambrose J., Jr., Brentwood  
 Weber, June E., Washington, D. C.  
 Webster, Carolyn I., Pylesville  
 Weidinger, Charles W., Baltimore  
 Wheeler, Waverley J., Baltimore  
 Williams, Dorothy E., College Park

#### FRESHMAN CLASS

Aitcheson, Genevieve, Laurel  
 Archer, John, Bel Air  
 Arnold, William D., Baltimore  
 Baitz, Mildred, Washington, D. C.  
 Barker, Marian E., Washington, D. C.  
 Beall, Marjorie, Beltsville  
 Bennett, R. Gordon, Salisbury  
 Boyda, John J., Iselin, Pa.  
 Brokamp, Ray W., Glen Burnie  
 Burroughs, Elizabeth E., Mechanicsville  
 Cantwell, Wilma J., Marriottsville  
 Carliss, John H., Windber, Pa.  
 Carpenter, Jean M., Hagerstown  
 Chronister, Mason F., Baltimore

Cline, Carl A., Jr., Monrovia  
 Collins, Hiram H., Crisfield  
 Collins, Thomas E., Washington, D. C.  
 Cook, Mary H., Washington, D. C.  
 Corosh, Frances R., Annapolis  
 DeVore, Clair E., Cumberland  
 Dooley, Helen L., Cardiff  
 Dubin, Charles, Baltimore  
 Duncan, Laura R., District Heights  
 Dunn, Katherine C., Silver Spring  
 Edwards, Blodwyn E., Washington, D. C.  
 Elder, John T., Jr., Riva  
 Ervin, James F., Havre de Grace  
 Farr, Mary K., Wayside



Forman, Sara, Washington, D. C.  
 Freudenberger, John G., Baltimore  
 Garonzik, Ruth, Baltimore  
 Greengold, H. Ruth, Annapolis  
 Griffith, Ann M., Rockville  
 Groves, Helen V., Cumberland  
 Hart, Richard K., Hagerstown  
 Haske, Frank J., Baltimore  
 Haynes, Joyce W., Silver Spring  
 Hoffman, Donald R., Hyattsville  
 Hottel, Betty L., College Park  
 Hurley, Robert F., Hyattsville  
 Jarboe, Ann E., Leonardtown  
 Jones, John S., Jr., Washington, D. C.  
 Kahn, Estelle W., Baltimore  
 Kehoe, James H., Bel Air  
 Kemp, Margaret C., College Park  
 Keys, Virginia A., Laurel  
 King, Judith A., Washington, D. C.  
 Kolius, William S., Washington, D. C.  
 Legge, Martha J., Cumberland  
 Leight, Rita, Teaneck, N. J.  
 Leites, Israel, Baltimore  
 Lewis, Edythe M., Baltimore  
 Ligon, Julia C., Brinklow  
 Link, Mary E., Baltimore  
 Long, Virginia M., Selbyville, Del.  
 Longest, Katherine A., Baltimore  
 McLuckie, Virginia L., Cumberland

Miltzer, Gustav D., Washington, D. C.  
 Naughten, Edward T., Washington, D. C.  
 Nordwall, Alice E., Princess Anne  
 Norton, Charles A., Ogden, Utah  
 Parrish, Evelyn M., Brentwood  
 Poetzsch, Paul H., Baltimore  
 Reed, Walter F., Dundalk  
 Ross, Mary L., Cumberland  
 Ryan, Winnifred A., Washington, D. C.  
 Ryon, Mary J., Waldorf  
 Shea, Katherine J., Holyoke, Mass.  
 Sherman, Eleanor, Baltimore  
 Smith, Adria J., Baltimore  
 Smith, Allen R., Baltimore  
 Smith, Virginia E., Mount Airy  
 Speake, Mary M., Luray, Va.  
 Spicknall, Lillian S., Fair Haven  
 Starlings, Cable P., Cheshire, Conn.  
 Stilwell, Dorothy, Ft. Lauderdale, Fla.  
 Taylor, William J., Washington, D. C.  
 Teal, Lois A., Hyattsville  
 Thompson, Charles L., Baltimore  
 Walker, Mary A., Laurel  
 Watts, William E., Laurel  
 Wellinger, Phyllis M., Hagerstown  
 Wilson, N. Lorraine, Fulton  
 Wood, M. Virginia, Washington, D. C.  
 Zecher, Lyndon B., Hagerstown

#### UNCLASSIFIED AND PART TIME

Appler, Helen, Washington, D. C.  
 Baker, Robert L., Washington, D. C.  
 Beall, Susie C., Beltsville  
 Blandford, Mary L., College Park  
 Blondell, Mary, Washington, D. C.  
 Boote, Howard S., Catonsville  
 Boswell, Alice A., Brookeville  
 Bowman, Emma M., Mt. Airy  
 Boyd, Hollis R., Washington, D. C.  
 Bray, Mairie L., College Park  
 Brisker, Sarah F., Washington, D. C.  
 Bunch, Edward L., Bethesda  
 Burdette, Eunice E., Laurel  
 Burgess, Maurine D., Washington, D. C.  
 Carpenter, Virginia P., Washington, D. C.  
 Casbarian, Louise W., Riverdale  
 Clark, Ellen N., Silver Spring  
 Close, Marion B., Washington, D. C.  
 Craig, Madie E., Colmar Manor  
 Davis, John H., Hyattsville  
 Dawson, Wilson F., College Park  
 Detweiler, Frank S., Takoma Park  
 Dodd, Ocie E., Chevy Chase, D. C.  
 Duncan, Peggy E., Chevy Chase  
 Dunn, May A., Hyattsville  
 Ehrmantraut, Doris W., Washington, D. C.  
 Fennell, Dorothy, Beltsville

Ramsburg, Helen R., Beltsville  
 Ruark, Martha E., Salisbury  
 Ryder, Loretta A., Washington, D. C.  
 Sahlin, Emilie H., Annapolis  
 Sessions, DeForest E., Takoma Park  
 Smith, Francis D., Bennings, D. C.  
 Smith, Mary L., Washington, D. C.  
 Smith, Rosemary, Washington, D. C.  
 Steigner, Elizabeth R., Silver Spring  
 Stevenson, Lalla, Columbia, S. C.  
 Taylor, Mary M., Washington, D. C.  
 Troth, Elizabeth, Chevy Chase

Turner, Emily B., Riverdale  
 Upp, Carol L., Bethesda  
 Wells, H. Gertrude, Gaithersburg  
 Wetherby, Edith H., Welch, W. Va.  
 White, Eleanor E., Germantown  
 White, Ruth O., Brentwood  
 White, Virginia W., Germantown  
 Williams, Edith M., Washington, D. C.  
 Wolfenbarger, Floy, Washington, D. C.  
 Wyburne, Alice V., Washington, D. C.  
 Young, Irene, Silver Spring

#### EXTENSION TEACHERS-TRAINING COURSES

##### (Industrial Education, Baltimore)

Aaronson, Philip J.  
 Albaugh, Anna E.  
 Anderson, Charles  
 Arnold, Charles  
 Auth, Jack  
 Bachman, Oswald E.  
 Baer, A. Harris  
 Ball, Frances H.  
 Balsam, F. A.  
 Bargteil, Ralph  
 Barnard, E. H.  
 Barnes, Marie W.  
 Baughman, Elizabeth  
 Belt, Robert O.  
 Benesch, Esther  
 Benner, Elizabeth  
 Blackiston, James T.  
 Boote, H. S.  
 Bosley, Edgar  
 Brickley, Clarence  
 Bull, Carl  
 Bull, Edgar M.  
 Bullough, Van Ness  
 Burns, Thelma W.  
 Cantwell, Hammond  
 Capocci, Catherine F.  
 Carr, William  
 Checinski, Walter  
 Cohen, Sidney  
 Corbett, Ruth  
 Crist, Cornelia R.  
 Dalinsky, Isador  
 Davidson, D.  
 Deitrich, Elmira  
 Dewling, Evelyn  
 Diver, Grant  
 Doering, Ruth H.  
 Donelson, Raymond  
 Dubin, Charles  
 Dudderar, Charles W.  
 Dunwoody, Ruth  
 Ebaugh, Margaret

Edwards, Walter F.  
 Ekas, Alice A.  
 Ely, James H.  
 Everhart, William C.  
 Faulkner, Floyd C.  
 Fisher, Gilbert  
 Fisher, Joseph  
 Freedman, Norman  
 Friedman, Isadore  
 Galley, Joseph N.  
 Gardner, Harry  
 Gillan, Andrew S.  
 Goeller, John E.  
 Griffith, Jeanette  
 Griefzu, Edward G.  
 Gross, Charles R.  
 Grove, E. K.  
 Haffner, Emanuel  
 Hall, Irvin  
 Hamel, W. Ramont  
 Hardy, Earl C.  
 Haugh, Marian  
 Hearn, Bessie V.  
 Hensen, Edward C.  
 Hensen, Henry L.  
 Herbert, Russell M.  
 Hetrick, J. M.  
 Heylmun, S. L.  
 Himmel, Mildred  
 Hisley, Lillian P.  
 Hoffman, Jennie Z.  
 Hollander, Anna  
 Horney, Paul  
 Hucksoll William  
 Hughes, Marion W.  
 Jacob, Felice E.  
 Jacobson, Sara E.  
 Jirsa, Charles  
 Jones, Julia  
 Kacher, Russell E.  
 Kalb, Merrill B.  
 Karpa, Lillian



Keating, Lyda  
 Kidd, Frank  
 Kinsey, Allan S., Jr.  
 Kornblatt, Joseph  
 Krapkat, Herbert N.  
 Krause, Louise  
 Kuehn, Peter  
 Lambert, Hildreth  
 Latham, Helen M.  
 Laugerman, John B.  
 Levin, Sol  
 Longford, R. C.  
 Longley, E. L.  
 Lovering, Katherine A.  
 Mainen, Allan  
 Malach, Barbara  
 Manakee, Edward Y.  
 Matthaui, Lewis A.  
 McCann, Harold R.  
 McCarriar, Herbert G.  
 McCauley, Anna C.  
 McCauley, Everett S.  
 McDairmant, John  
 McQuade, John  
 Melby, A. E.  
 Mele, Virginia  
 Mencke, Minnie R.  
 Merkle, Clifford  
 Meyer, Arthur  
 Meyer, Elmer L., Jr.  
 Myers, George A.  
 Miller, Mayfort P.  
 Munschauer, R. L.  
 Murray, Eleanor D.  
 Nathanson, David  
 Neilson, Julia M.  
 Newman, Ruth  
 Nichols, J. Harvey  
 Nicol, Lindsay  
 Norris, Cecil  
 Phillips, LeRoy  
 Porter, Ethel B.  
 Polk, Mary L.  
 Powell, George C.  
 Proctor, James O.  
 Purnell, Mildred I.  
 Quinan, Allen J.  
 Rachanow, Louis

Armstrong, Milton S.  
 Boston, Georgia  
 Bradford, Althea  
 Brooks, Ellen  
 Brooks, Eunice  
 Brown, Alexander  
 Callis, Mattie C.  
 Carter, Hughes

Randall, Roland E.  
 Rankin, George T.  
 Rassa, William J.  
 Rea, Florence R.  
 Rice, Bessie L.  
 Rich, Bessie A.  
 Richards, Ruth  
 Rivkin, Leon  
 Rock, Charles D.  
 Rosenberg, Albert J.  
 Routzahn, Evelyn R.  
 Rubin, Hilda R.  
 Sachs, Frank  
 Saltzman, Jack  
 Schubert, Florence H.  
 Schwarzmunn, George  
 Siegel, Esther  
 Silbert, Celia  
 Silbert, Keel  
 Silverman, Frank  
 Skidmore, Carl T.  
 Smith, H. D.  
 Smith, Virginia E.  
 Soper, Agnes P.  
 Spencer, Alma F.  
 Stach, James A.  
 Stone, John T.  
 Thomas, Eleanor L.  
 Valle, Joseph A.  
 Valle, Philip J.  
 Vansant, Lillian H.  
 Vogel, G. P.  
 Waltham, W. Alan  
 Waskey, Bertram H.  
 Watkins, Robert S.  
 Weigate, Charles  
 Weikel, Stewart F.  
 Weiland, Richard  
 Wheeler, Elwood L.  
 Whipple, Stanley R.  
 White, Clinton E.  
 Wilkison, John W.  
 Willhide, Elsa H.  
 Williams, Laurence L.  
 Williams, Margaret  
 Wolfe, Charles  
 Yoder, Merle  
 Zimmerman, Ralph L.

#### COLORED

Carter, Mary H.  
 DeNeal, Ola L.  
 Diggs, Odessa S.  
 Flanagan, LeRoy  
 Fleming, Bertha R.  
 Francis, Alma T.  
 Glascoe, Fannie  
 Grinage, Jeanette

Gross, Clarence E.  
 Gwynn, Ruby W.  
 Hall, Edna  
 Harding, George B.  
 Harris, Zelmar A.  
 Hughes, Helen G.  
 Jackson, Marione  
 Jones, Roberta W.  
 Keyes, Alice R.  
 Knox, Mamie G.  
 Murray, Clifton S.  
 Peck, Edward J.

Perdue, Saul M.  
 Pollard, Clara J.  
 Shields, Walker A.  
 Spriggs, Edith  
 Stevenson, Eulalia W.  
 Travers, Helen V.  
 Washington, Mathilde  
 Waters, Wilmore E., Jr.  
 Wilson, Hallie H.  
 Wilson, Jane  
 Wilson, Louis H.  
 Wood, John M.

### COLLEGE OF ENGINEERING

#### SENIOR CLASS

Bartoo, Donald G., Hyattsville  
 Beckham, Robert W., Bethesda  
 Berger, Herman W., Jr., Baltimore  
 Brotemarkle, Martin L., Cumberland  
 Calder, Wright G., Baltimore  
 Clark, Willson C., Takoma Park  
 Dial, Herman P., Baltimore  
 Donahue, William J., Jr., Washington, D. C.  
 Eggers, Harold A., Washington, D. C.  
 Felton, Charles W., Washington, D. C.  
 Firmin, Philip, Washington, D. C.  
 Furtney, Charles S., Cumberland  
 Gall, Ralph G., Thurmont  
 Gibbs, Edward H. D., Hyattsville  
 Gilbert, George E., College Park  
 Haspert, Mathews J., Chester  
 Heiss, John W., Washington, D. C.  
 Horman, Austin S., Baltimore  
 Hudgins, Houlder, Washington, D. C.  
 Hueper, Louis R., Berwyn  
 Hynson, B. Thomas, Washington, D. C.  
 Jackson, Robert A., Washington, D. C.  
 Janes, Charles F., Anacostia, D. C.

Kelly, Harold L., Jr., Forest Glen  
 Leasure, William C., Silver Spring  
 Lopata, Alexander A., Baltimore  
 Ludlow, Francis W., Washington, D. C.  
 Mann, Arthur W., Washington, D. C.  
 Marans, Allen, Washington, D. C.  
 McCool, William A., Hagerstown  
 McCurdy, Philip C., Kensington  
 McDonald, Thomas S., Perryman  
 McLean, John A., Washington, D. C.  
 McLeod, Robert J., Edmonston  
 Ogle, Emerson, Catonsville  
 Orcutt, Charles B., Washington, D. C.  
 Patterson, Norman P., Baltimore  
 Platt, Doran S., Jr., Washington, D. C.  
 Rose, Glen W., Washington, D. C.  
 Roylance, Merriwether L., Glenn Dale  
 Shinn, John S., Echo Lake, Pa.  
 Shoemaker, Francis D., Bethesda  
 Smith, Warner T., College Park  
 Teal, Gilbert E., Pasadena  
 Tibbets, William S., Chevy Chase  
 Wedding, Presley A., Washington, D. C.  
 Willis, Alvin H., Washington, D. C.

#### JUNIOR CLASS

Andrews, John T., Jr., Baltimore  
 Backhaus, Albert P., Baltimore  
 Bennett, Joseph H., Washington, D. C.  
 Bishoff, Frederick, Washington, D. C.  
 Bowman, George A., Annapolis Junction  
 Brookhart, George C., Jarrettsville  
 Browning, John R., Washington, D. C.  
 Bryant, William C., Takoma Park  
 Chappellear, James A., Washington, D. C.  
 Chilcoat, Ralph L., Washington, D. C.  
 Cladny, Harold, Washington, D. C.  
 Collins, James E., Crisfield  
 Collins, Ralph A., Jr., Washington, D. C.  
 Collison, Malcolm N., Takoma Park  
 Connery, Edward F., Washington, D. C.

Corbin, Maurice E., Woodbine  
 DeArmey, Frank T., Windber, Pa.  
 Diggs, Robert S., Baltimore  
 Goldbeck, Page, Chevy Chase  
 Goldberg, Paul, Baltimore  
 Gray, Vernon H., Chevy Chase  
 Harris, Fred, Washington, D. C.  
 Hollister, Curtis L., Washington, D. C.  
 Horne, John F., Chevy Chase  
 Hutton, Joel W., College Park  
 Kennedy, Edward J., Baltimore  
 Kluckhuhn, Frederick H., Laurel  
 Korab, Arnold A., Colmar Manor  
 Latterner, Henry, Jr., Chevy Chase  
 Lodge, Fred R., Washington, D. C.



Luttrell, John C., Washington, D. C.  
 Lynham, John C., Hyattsville  
 Mattingly, Robert L., Washington, D. C.  
 Maynard, William G., Baltimore  
 Meinzer, Roy C., Washington, D. C.  
 Mims, James R., Jr., College Park  
 Morgan, Lee, Washington, D. C.  
 Mueller, Eugene F., Jr., Washington, D. C.  
 Muncks, John D., Baltimore  
 Odell, Robert C., Ellicott City  
 Owens, Herbert M., Federalburg  
 Parce, John R., Annapolis  
 Parsons, Charles R., Washington, D. C.  
 Peck, Alvin B., Washington, D. C.  
 Phillips, Adon W., Bethesda  
 Phillips, Clarence W., Princess Ann  
 Pierce, Charles H., Jr., Washington, D. C.

#### SOPHOMORE CLASS

Ashmun, Van S., Washington, D. C.  
 Bamman, Richard K., Palmers  
 Bebb, Edward K., Chevy Chase  
 Berg, Charles M., Baltimore  
 Boyd, Robert H., Washington, D. C.  
 Brashears, Richard S., Washington, D. C.  
 Budkoff, Nicholas, Lynn, Mass.  
 Cook, Robert P., Washington, D. C.  
 Daly, C. Robert, Baltimore  
 Davis, Preston L., Jr., Washington, D. C.  
 Davis, William B., Jr., Washington, D. C.  
 DeArmey, John J., Windber, Pa.  
 Deeley, Haskin U., Baltimore  
 Dorr, George W., Washington, D. C.  
 Elvove, Elies, Washington, D. C.  
 Essex, H. Alfred, Washington, D. C.  
 Etkind, Irving J., New Haven, Conn.  
 Farrall, John A., Washington, D. C.  
 Fleming, H. Edwin, Savage  
 Forrester, James L., Berwyn  
 Franke, Harold H., Washington, D. C.  
 Gebhardt, Charles M., Silver Spring  
 Gerber, Sigmund I., Baltimore  
 Gessford, Richard L., Mt. Rainier  
 Gottlieb, Robert, Washington, D. C.  
 Greenwood, Orville W., Brentwood  
 Hall, Herbert P., Washington, D. C.  
 Hart, Robert L., Hagerstown  
 Harvey, Cecil L., Washington, D. C.  
 Hennighausen, Louis K., Baltimore  
 Hewitt, Frederic M., Chevy Chase  
 Holbrook, Charles C., College Park  
 Janes, Henry W., Anacostia, D. C.  
 Jensen, Willard C., Washington, D. C.  
 Jones, Stephen H., Leonardtown  
 Jordan, Ralph S., Washington, D. C.  
 Kestler, Paul G., Baltimore  
 King, Thomas O., Savage

Porter, Wade T., Jr., Washington, D. C.  
 Putman, Raymond S., Washington, D. C.  
 Roundy, Paul V., Jr., Chevy Chase  
 Savage, Alfred E., Washington, D. C.  
 Schreiber, Irvin R., Washington, D. C.  
 Shaffer, Thomas N., Washington, D. C.  
 Shearer, Ross W., Riverdale  
 Siems, John L., Baltimore  
 Smith, John P., Jr., Washington, D. C.  
 Sperry, Harold C., Baltimore  
 Turnbull, James, Takoma Park  
 Vernay, Howard A., Jr., Baltimore  
 Walton, Robert L., Washington, D. C.  
 Wettje, Robert H., Riverdale  
 Willett, LeRoy G., Washington, D. C.  
 Wolk, Reuben, Washington, D. C.  
 Yourtee, Leon R., Jr., Brownsville

Kinney, Robert W., Washington, D. C.  
 Krafft, Robert E., Washington, D. C.  
 Kreuzburg, Harvey W., Jr., Silver Spring  
 Lapoint, George M., Catonsville  
 Lasswell, Philip M., Takoma Park  
 Lynt, Richard K., Jr., Washington, D. C.  
 Main, Irwin I., Seat Pleasant  
 Manown, George F., Baltimore  
 Mause, John D., Jr., Myersville  
 McClenon, Donald, Takoma Park  
 McGill, Lloyd H., Thurmont  
 Mitchell, David H., Washington, D. C.  
 Moran, Joseph T., Westernport  
 Morris, Francis C., Washington, D. C.  
 Mulitz, Milton M., Washington, D. C.  
 Myers, George H., Hyattsville  
 Perkins, Fred W., Jr., Chevy Chase  
 Phillips, Irving, Washington, D. C.  
 Poole, Lewis A., Annapolis  
 Reed, Ira L., Laurel  
 Roberts, Edward R., Washington, D. C.  
 Robertson, Elliott B., Bethesda  
 Russell, Joseph S., Maddox  
 Scott, Elgin W., Jr., Washington, D. C.  
 Scully, Walter D., Washington, D. C.  
 Seeley, George E., Baltimore  
 Simms, Harvey C., Washington, D. C.  
 Smith, Welch, Washington, D. C.  
 Stabler, Sydney S., Ednor  
 Stedman, Henry T., Catonsville  
 Steiner, Warren E., Washington, D. C.  
 Stevens, John W., Takoma Park  
 Strausbaugh, Donn P., Chevy Chase  
 Talone, Edward R., Brentwood  
 Thompson, T. Manning, Washington, D. C.  
 Warfield, Gustavus A., College Park  
 Wharton, Thomas P., College Park  
 Witt, Emmitt C., Washington, D. C.

#### FRESHMAN CLASS

Addleman, Louis I., Baltimore  
 Albarano, Ralph J., Lilly, Pa.  
 Altschuler, Leon, Washington, D. C.  
 Amos, Wallace R., Silver Spring  
 Baldwin, Robert D., Riverdale  
 Beall, John, Laurel  
 Bell, Nathan J., Hyattsville  
 Bengoechea, Adam, Chevy Chase  
 Berry, Charles R., Hagerstown  
 Booze, William C., Baltimore  
 Brand, Robert A., Washington, D. C.  
 Brauns, William P., Jr., Odenton  
 Brockman, Roy C., Baltimore  
 Brown, Elton H., Mt. Rainier  
 Buck, James W., Washington, D. C.  
 Burton, Charles J., Takoma Park  
 Camardi, Nicholas J., Washington, D. C.  
 Carpenter Byron L., Washington, D. C.  
 Carroll, Richard W., Alexandria, Va.  
 Cawley, Wilbert H., Denton  
 Clarke, Joseph A., Jessup  
 Cole, Albert H., Linthicum Heights  
 Coleman, Thomas L., Washington, D. C.  
 Corkran, William H., Trappe  
 Cox, Junior N., Baltimore  
 Cranford, Leonard C., Washington, D. C.  
 Davidson, Donald C., Washington, D. C.  
 Davis, Warren P., Washington, D. C.  
 DiLeonardi, Anthony, Baltimore  
 Dix, Francis X., Washington, D. C.  
 Downing, John A., Jr., Edmonston  
 Emrich, William S., Hebron  
 Farnsworth, John K., Washington, D. C.  
 Ferrar, Charles W., Lanham  
 Fletcher, Arthur W., Linthicum Heights  
 Folk, William C., Washington, D. C.  
 Foltz, Henry C., Hagerstown  
 Gallagher, Harry G., Relay  
 Gore, Bertram W., Jr., Baltimore  
 Graham, William M., Baltimore  
 Gray, Mason W., Poolesville  
 Heil, George J., Baltimore  
 Henry, William C., Fort George G. Meade  
 Herbert, Wilbur M., Baltimore  
 Herman, Harold, Washington, D. C.  
 Herrmann, Edward M., Baltimore  
 Jackson, Robert L., Bethesda  
 Kammer, Charles E., Baltimore  
 Kaufman, Daniel, Washington, D. C.  
 Kelley, Joseph W., Cumberland  
 Kennedy, Harry W., Chesapeake City  
 Kimball, Henry F., Washington, D. C.  
 Kirby, James T., Trappe  
 Lane, John E., Washington, D. C.  
 Lanham, Paul T., Lanham  
 Lanigan, James M., Washington, D. C.  
 Leach, Herbert L., Essex Junction, Vt.  
 Lee, Gin H., Washington, D. C.  
 LeMat, Lee E., Washington, D. C.

Lewis, Francis A., Woodbine  
 Lewis, Harvey S., Chevy Chase  
 Lodge, Robert J., Baltimore  
 Lozupone, Frank P., Chevy Chase  
 Machen, William S., Hyattsville  
 Maidens, William A., Washington, D. C.  
 Males, Irwin J., Washington, D. C.  
 Marmer, Kalmon E., Washington, D. C.  
 Marzolf, Joseph M., Jr., Deales  
 Mattingly, Lawrence J., Washington, D. C.  
 Meeks, George E., Washington, D. C.  
 Mericle, John P., Washington, D. C.  
 Miller, Alan R., Washington, D. C.  
 Morrison, Norman J., Jr., Chevy Chase  
 Moynelo, Andres E., Washington, D. C.  
 Nelson, Clifford L., White Hall  
 Northrop, Sanford E., Hagerstown  
 Odell, Charles N., Ellicott City  
 O'Farrell, Rufus E., Washington, D. C.  
 Oswald, Huyette B., College Park  
 Otten, Leonard J., Parkville  
 Owings, Noble L., Riverdale  
 Page, Thad S., Jr., Washington, D. S.  
 Pope, Llewellyn N., Washington, D. C.  
 Quinn, Thomas H., Laurel  
 Randall, Philip A., Washington, D. C.  
 Reckord, John G., Baltimore  
 Rector, Ralph L., Washington, D. C.  
 Reynolds, Austin R., Baltimore  
 Richardson, Robert R., Washington, D. C.  
 Riley, Thomas W., Germantown  
 Rimmer, William, University Park  
 Ripple, Roland C., Cheltenham  
 Scott, Roy F., Washington, D. C.  
 Scribner, Kimball J., Washington, D. C.  
 Seanor, Eugene I., Muirkirk  
 Shaw, Bowen W., Silver Spring  
 Shipe, John K., Washington, D. C.  
 Slicer, William A., Gaithersburg  
 Sloan, James D., Cumberland  
 Speare, Almus R., Rockville  
 Spicer, William A., Baltimore  
 Stewart, Carl H., Jr., Brooklyn  
 Storrs, Gardner H., Linthicum Heights  
 Towson, Paul H., Baltimore  
 Vollmer, Harry F., III, Baltimore  
 Waigand William F., Riverdale  
 Warner, Robert E., Baltimore  
 Warren, Paul W., Washington, D. C.  
 Warthen, Gerald B., Kensington  
 Watkins, William H., Washington, D. C.  
 Wells, William F., Baltimore  
 Whalen, Stanley M., Washington, D. C.  
 Wheeler, Francis W., Silver Spring  
 Wilson, Robert M., Washington, D. C.  
 Woodward, Ralph A., Port Republic  
 Yocum, Wilbur F., Chevy Chase  
 Young, Charles M., Washington, D. C.



# UNCLASSIFIED AND PART TIME

Loweth, Donald C., Washington, D. C. Mitchell, Herbert F., Jr., Hyattsville  
Von Gohren, Eugene L., College Park

## EXTENSION CLASSES IN MINING

### BARTON

Beeman, Walter  
Beeman, Oscar  
Brennan, George  
Broadwater, Gus  
Broadwater, Harry  
Crowe, George  
Custer, Thomas

Hoffa, Arthur  
Jones, Thomas J.  
Metz, Samuel A.  
Miller, David  
Miller, E. L.  
Sigler, Adam  
Wilson, Jacob V.

### CRELLIN

Ashby, Lee  
Ashby, Walter  
Bowser, Lawrence  
Cannon, John  
Cannon, Harold  
Cannon, Lewis  
Dawson, Paul  
Durst, Wendell  
Faherty, William  
Forman, Carroll  
Forman, John H.  
Friend, Arthur  
Gilmore, Junior  
Hahn, Carroll  
Henline, Robert

Henline, T. C.  
Hinebaugh, George  
Kelly, Cecil  
Lewis, Buress  
Lewis, Burl  
Lewis, Darrell  
Mersing, Lewis  
Reckert, Carlos  
Roy, Arthur  
Saurers, Ray  
Shaffer, Kenneth  
Sisler, Clyde  
Smith, Theodore  
Smith, Robert

### FROSTBURG (Elementary)

Edwards, Jack  
Edwards, Robert L., Jr.  
Griffith, John A.  
Griffith, Earl  
Hughes, Ben

Kidwell, Thomas  
Pryor, Clinton  
Richardson, Osborne  
Skidmore, Jonas  
Weimer, Stanley

### FROSTBURG (Advanced)

Abbott, William C.  
Casey, Addis  
Close, James H.  
Davis, Theodore  
Edwards, R. L.  
Glodfelty, Robert  
Keister, John  
Lewis, Edward  
Montana, Joseph  
Odgers, Charles

Powers, Clarence  
Powers, Frank T.  
Rephorn, William H.  
Rankin, William  
Smouse, John  
Stevenson, John P.  
Stowell, Edward  
Taylor, George  
Thomas, Phillip  
Todd, Robert K.

### FRIENDSVILLE

Coddington, Ernest  
Coddington, John  
DeWitt, Robert  
Friend, Everett  
Friend, Stanley

Kelly, Robert  
Kesner, Melvin  
Love, Thomas  
Mefford, Milton  
McCullough, Doyle H.

McCullough, Ray O., Jr.  
Schroyer, Joe  
Schroyer, Wade

Sines, Glenn  
VanSickle, Harry

### GILMORE

Alexander, James  
Brodie, Thomas  
Buckalew, Calvin  
Clark, John R.  
Clark, Robert  
Dye, Herbert

Jenkin, James H.  
Jenkin, Joseph A.  
Martin, Matthew, Sr.  
Martin, William H.  
Sulser, Harry

### GORMAN

Butts, David  
Butts, John  
Butts, Roy  
Evans, Maynard  
Foltz, Charles  
Hughes, John T.  
Miller, W. H.

Reall, Walter  
Ridings, J. A.  
Schell, Carl  
Sisler, Clarence  
Sisler, Leo  
Williams, George

### GRANTSVILLE

Alexander, Guy F.  
Beachey, Elmer  
Beachey, Vernon  
Beeman, Ira  
Broadwater, Elwood  
Butler, Byard  
Butler, Harold  
Butler, Robert

Folk, Glenn  
Miller, William F.  
Patton, Henry  
Patton, Norman  
Walls, Bernard  
Wilt, Erschel  
Wilburn, Reed  
Yommer, L. D.

### SHALLMAR

Burrell, Wilbur  
Brady, John  
Capper, John S.  
Harvey, Willis  
Hobbs, W. G.  
Kearney, Luke  
Lyons, Melvin

Martin, Ray  
McIntyre, C. D.  
Pettit, Joseph  
Rohm, James  
Shaffer, Albert  
Turner, Edward  
Warnick, W. T.

### VINDEX

Adams, Frank  
Beeman, Fred  
Bernard, Blaine  
Bernard, George  
Bowers, Meshach  
Boyce, William  
Chadderton, Wilfred  
Clark, James  
Comp, Elwood  
Cunningham, Frank  
Davis, Robert  
Dixon, Raymond  
Edwards, Harry  
Edwards, James  
Ellifritz, C. F.  
Ellifritz, Ralph  
Friend, George  
Junkins, Jack

Kifer, William  
Killkenny, Earl  
Kinser, James  
Kitzmiller, Ervin  
Knox, Russell J.  
Lipscomb, James  
Morrow, Robert C.  
McRobie, Albert  
Nelson, Dempsey  
Paugh, Harold  
Paugh, Lyle  
Pratt, Homer  
Simms, James  
Simms, Monzel  
Smith, Ocie  
Stewart, Frank  
Stewart, William  
Sweitzer, James



## GRADUATE SCHOOL

Acker, Keith G., College Heights  
 Adams, John R., Jr., Takoma Park  
 Algire, Glenn H., Baltimore  
 Allard, Howard F., Clarendon, Va.  
 Allen, Rolfe L., Washington, D. C.  
 Anderson, Earl J., Roy, Wash.  
 Anderson, R. P., Baltimore  
 Andrus, C. Fred, Washington, D. C.  
 Arnold, Hubert K., Hyattsville  
 Asero, John J., Washington, D. C.  
 Baerwald, Frances C., Baltimore  
 Baldwin, David H., Jr., Washington, D. C.  
 Baldwin, M'Liss A., Baltimore  
 Baldwin, Willis H., Havre de Grace  
 Barzhe, Jean, Washington, D. C.  
 Basil, Margaret L., Baltimore  
 Baughman, Estella P., Baltimore  
 Beardsell, Nellie, Baltimore  
 Beck, Frances, Baltimore  
 Bellman, Frank A., Baltimore  
 Bellows, John M., Jr., Maynard, Mass.  
 Billings, Samuel C., Takoma Park  
 Birnbaum, Leon S., Flemington, N. J.  
 Blue, Elmer C., Takoma Park  
 Boarman, William F., Hyattsville  
 Book, David R., Alexandria, Va.  
 Boyles, William A., College Park  
 Brechbill, Edith L., College Park  
 Brenner, Abner, Washington, D. C.  
 Brewer, Charles M., Hyattsville  
 Bristow, Rosa L. S., Chevy Chase  
 Brooks, Paul S., Buckhannon, W. Va.  
 Brown, James McC., Baltimore  
 Buddington, Arthur R., College Park  
 Burbank, Lydia M., Baltimore  
 Burgess, Lionel, Ellicott City  
 Burton, John O., Washington, D. C.  
 Byers, Alan C., Canonsburg, Pa.  
 Cannon, M. H., Washington, D. C.  
 Carhart, Homer W., Santiago, Chile  
 Carr, C. Jelleff, Baltimore  
 Carter, Edward P., College Park  
 Chadwick, Louise A., Washington, D. C.  
 Chandler, Frederick B., Orono, Me.  
 Citrin, Estelle, Brooklyn, N. Y.  
 Coddington, James W., Berwyn  
 Coe, Mayne R., Jr., Washington, D. C.  
 Cohen, Bernard C., Baltimore  
 Coles, Elsie R., Baltimore  
 Coleman, Eugene F., Washington, D. C.  
 Conley, Carroll L., Baltimore  
 Cooper, Sara, Baltimore  
 Cordish, Hilda, Baltimore  
 Cox, Benjamin F., College Park  
 Croft, Charles C., Washington, D. C.

Crosby, Muriel E., Washington, D. C.  
 Cross, John M., Little Falls, N. J.  
 Cross, Mary R., Queenstown  
 Crossman, Mora, Brooklandville  
 Cabbage, Saylor C., Washington, D. C.  
 Cunningham, Katherine, Washington, D. C.  
 Cwalina, Gustav E., Baltimore  
 D'Ambrogi, Gulus D., Baltimore  
 Davis, Edward F., Arlington, Va.  
 DeDominicis, Amelia C., Baltimore  
 Diehn, Karl H., Cold Spring Harbor, N. Y.  
 Douglass, Edgar M., Washington, D. C.  
 Dozois, K. Pierre, Baltimore  
 Draper, Helen M., Baltimore  
 Draper, Mary E., Baltimore  
 Dudley, Horace C., Washington, D. C.  
 Dunker, Melvin F. W., Baltimore  
 Durrenbarger, Ruth, Orlando, Fla.  
 Engel, Lea K., Washington, D. C.  
 Esch, Jane H., Chevy Chase  
 Evans, Warren R., Bladensburg  
 Everhart, Herbert W., Kearneysville, W. Va.  
 Faber, John E., College Heights  
 Farson, John H., Showell  
 Fenton, Louise E., Washington, D. C.  
 Finkbinder, Roberta E., Baltimore  
 Fishkin, Irwin M., Perth Amboy, N. J.  
 Florestano, Herbert J., Annapolis  
 Forman, Sylvan E., Baltimore  
 Foster, Carroll P., Baltimore  
 Frack, Edward J., Arlington, Va.  
 Franklin, Elizabeth C., Baltimore  
 Freeman, Andrew F., Hyattsville  
 Fricke, Geneva E., Hyattsville  
 Friedman, Jessica, Baltimore  
 Frush, Harriet L., Pella, Iowa  
 Gahan, James B., Berwyn  
 Gammon, Nathan, Jr., Washington, D. C.  
 Garrels, Harriet, Washington, D. C.  
 Gersh, Edith D., Baltimore  
 Gershberg, Herbert, Bronx, N. Y.  
 Gilbert, Loami M., Jr., Benson, N. C.  
 Glasgow, Augustus R., Jr., Hyattsville  
 Golden, Lex B., Washington, D. C.  
 Goodner, Henrietta, Arlington, Va.  
 Goss, Warren H., Chevy Chase  
 Graff, Frances B., Baltimore  
 Graham, James G., Washington, D. C.  
 Gray, Elizabeth K., Baltimore  
 Greenwood, Grace-Louise, Brentwood  
 Gregory, Florence I., Washington, D. C.  
 Griffiths, Leonard S., Baltimore  
 Grove, Donald C., Baltimore  
 Haas, Frances S., Takoma Park  
 Haenni, Edward O., Takoma Park

Haller, Harrison S., Baltimore  
 Hammond, E. Gordon, Baltimore  
 Hanzlik, Henry J., Swarthmore, Pa.  
 Hardell, Elmer, Washington, D. C.  
 Harris, Hillman C., Washington, D. C.  
 Hart, William J., Mt. Rainier  
 Haszard, Frank K., Hyattsville  
 Heinemann, Bernard, Bronx, N. Y.  
 Heller, Hugh A., Atlantic City, N. J.  
 Herzog, Helen B., Baltimore  
 Herstein, Cecelia R., Baltimore  
 Hesse, Claron O., Los Angeles, Calif.  
 Hickey, Routh V., Pope's Creek  
 Higgins, Richard W., Washington, D. C.  
 Hipolite, Carolyn P., Baltimore  
 Hitz, C. W., Fortescue, Mo.  
 Hoadley, Alfred D., Swarthmore, Pa.  
 Hoadley, Frank T., Chevy Chase  
 Hobbs, Robert B., Washington, D. C.  
 Hollingsworth, Ellen K., Baltimore  
 Hollis, Edgar H., Frederick  
 Horne, William A., Chevy Chase  
 House, Bolton M., College Park  
 Houston, David F., Washington, D. C.  
 Howard, Frank L., Hyattsville  
 Hunt, William H., Baltimore  
 Ingersoll, Henry G., Chestertown  
 Ives, J. Russell, Rolfe, Iowa  
 Jacob, Walter C., Manchester, Mich.  
 Jaeger, John R., Baltimore  
 James, Artus, Baltimore  
 Janson, Eugene F., Washington, D. C.  
 Jarrell, Temple R., Hyattsville  
 Jeffers, Walter F., Berwyn  
 Jehle, Ruth A., Hyattsville  
 Jessup, D. A., Washington, D. C.  
 Johnson, Alfareta C., Antigo, Wis.  
 Jones, Howard A., Washington, D. C.  
 Jones, Merriam A., Washington, D. C.  
 Kalousek, George F., Washington, D. C.  
 Kauffman, Wilbur R., Washington, D. C.  
 Keyes, Winifred A., Missoula, Mont.  
 Kilby, Lucio J., State Mills, Va.  
 Killen, John J., Baltimore  
 Killingsworth, Frederic K., Columbia, S. C.  
 Kirk, Ruby L., Elkton  
 Klitzner, Frank, Baltimore  
 Kolodner, Lee Bressler, Baltimore  
 Kraemer, Leonard S., Baltimore  
 Kraybill, Herman F., Marietta, Pa.  
 Lachen, George P., Detroit, Mich.  
 Laden, Hyman N., Philadelphia, Pa.  
 Lakin, Hubert W., Silver Spring  
 Lamberton, Berenice E., Washington, D. C.  
 Lanham, William B., Jr., Silver Spring  
 Lankford, Mary Lee, Jessup  
 Lee, Gregory A., Baltimore

Levenson, Leonard H., Pittsburgh, Pa.  
 Levin, Irvin, Baltimore  
 Levin, Nathan, Baltimore  
 Linder, Dorothy E., Washington, D. C.  
 Linzer, Jesse O., Long Beach, N. Y.  
 Littleford, Robert A., Washington, D. C.  
 Lofgren, Olga C., Brentwood  
 Love, Solomon, Washington, D. C.  
 Lowe, Charles S., Takoma Park  
 Luthey, Helen G., Baltimore  
 Lyons, Alice H., Baltimore  
 Maddox, Louise, Hyattsville  
 Madigan, George F., Washington, D. C.  
 Magruder, John W., College Park  
 Mandel, Jacob, Jersey City, N. J.  
 Marth, Paul C., Beltsville  
 Matheson, Harry, Washington, D. C.  
 Mayer, Elmer L., Washington, D. C.  
 McCann, Lewis P., Dayton, Ohio  
 McCollum, Frank L., Jonesport, Me.  
 McCurléy, Anne S., Baltimore  
 McDermott, Edna C., Midland  
 McFarland, C. Elizabeth, Cumberland  
 McGowan, George E., Baltimore  
 McNamara, Bernard P., Baltimore  
 McVey, Warren C., Landover  
 Merrill, William H., Baltimore  
 Messina, Julius, Baltimore  
 Miller, Fred L., Mt. Rainier  
 Miller, Howard A., Rochester, N. Y.  
 Miller, R. R., Washington, D. C.  
 Millett, Sylvia, Pen Mar, Pa.  
 Misiek, William, Washington, D. C.  
 Mohlhenrich, Gretchen, Baltimore  
 Morris, Leona S., College Park  
 Moskey, Thomas A., Jr., Washington, D. C.  
 Mulholland, Elizabeth A., Baltimore  
 Munsey, Virdell E., Washington, D. C.  
 Murphy, Harry T., Anacostia, D. C.  
 Myers, Alfred T., Riverdale  
 Nash, Carroll B., College Park  
 Nelson, Eleanor R., Washington, D. C.  
 Nixdorff, Helen P., Baltimore  
 Nott, Perry J., Long Beach, N. Y.  
 Nusinow, Samuel, Baltimore  
 Oberlin, Elisabeth S., Jessup  
 Olson, Rodney A., Somerville, Mass.  
 Owings, Eva M. R., Baltimore  
 Painter, Elizabeth E., New Freedom, Pa.  
 Parent, Paul A., Washington, D. C.  
 Parsons, Henry O., Albany, Wyo.  
 Pelczar, Michael J., Jr., Stemmers Run  
 Pendleton, Theodosia R., Catonsville  
 Pfeffer, Arnold Z., Bronx, N. Y.  
 Pitts, D. Helen, Baltimore  
 Poffenberger, Paul R., Hagerstown  
 Pottinger, Samuel R., Washington, D. C.



## COLLEGE OF HOME ECONOMICS

### SENIOR CLASS

Benton, Betty L., Silver Spring	Price, Margaret A., Ridgewood, N. J.
Rooth, Emma L., Brunswick	Rymer, Joan W., Hyattsville
Ellis, Bernice, College Park	Snyder, Ruth I., College Park
Garner, Mary F., Washington, D. C.	Somers, Helen, Corozal, Canal Zone
Giles, Martha L., Washington, D. C.	Spitler, Elizabeth, Luray, Va.
Goll, Katharine E., Washington, D. C.	Starr, Margaret E., Hyattsville
Hazard, Edith W., Takoma Park	Stearns, Lois E., Mt. Rainier
Hughes, Harriet E., Chevy Chase	Stolzenbach, Helen A., Baltimore
Jeffers, Elizabeth C., Washington, D. C.	Volland, Katherine N., Hyattsville
Leishear, Virginia E., Washington, D. C.	Waldman, Flora E., Washington, D. C.
Millar, Dorothy V., Washington, D. C.	Weidemann, Janet S., Washington, D. C.
Miller, Mary F., Silver Spring	Wulf, Vivian E., Washington, D. C.

### JUNIOR CLASS

Allen, Josephine R., Takoma Park	Jones, Audrey S., Washington, D. C.
Baines, Anna M., Lanham	Kaylor, Helen L., Hagerstown
Beall, Virginia L., Bethesda	Knight, Ruth E., Washington, D. C.
Beggs, Mary A., Baltimore	Krauss, Mary G., Baltimore
Broughton, Elinor C., College Park	Kuhn, Lois M., Bethesda
Burrier, Letitia S., Baltimore	Leane, Helen D., Washington, D. C.
Caldwell, Katherine, Chevy Chase	Lyons, Betty L., Sykesville
Cruikshank, Eleanor M. A., Baltimore	McGinnis, Verneena, Pomonkey
Dahn, N. Eloise, Chevy Chase	Mills, Josephine H., Cumberland
Davis, Katherine I., Washington, D. C.	Quirk, Eleanor K., Washington, D. C.
Dulin, Jean M. A., Chevy Chase	Reville, Ruth C., Baltimore
Fisher, Ida A., Takoma Park	Rosin, Anne, Silver Spring
Gorsuch, M. Jeannette R., New Windsor	Snyder, Paula W., Washington, D. C.
Gould, Irene S., Takoma Park	Walker, Vera H., Ellicott City
Hearn, Mildred L., Washington, D. C.	Weber, Ruth P., Cumberland
Jefferson, Evelyn M., Salisbury	Wellington, Esther R., Takoma Park
Jenkins, Mary E., Suitland	

### SOPHOMORE CLASS

Abbott, Kathryn F., District Heights	Kephart, Jane F., Takoma Park
Adkins, Kathryn, Salisbury	Law, Betty H., Washington, D. C.
Bain, Betty B., Washington, D. C.	MacDonald, Margaret E., Bethesda
Balderston, Helen G., Colora	McGinniss, Bell W., Kensington
Beals, Jane H., Washington, D. C.	McLean, Anne, Pennington, N. J.
Bloom, Betty R., Cleveland Heights, O.	Miller, Alma V., Baltimore
Bosley, Audrey M., Baltimore	Nash, Constance M., Chevy Chase
Byrd, Evelyn W., College Park	Neumann, Eileen C., Freeport, N. Y.
Cain, Harriet G., Felton, Del.	Platt, Helen B., Washington, D. C.
Cochran, Olive A., Mercer, Pa.	Samson, Catherine M., Takoma Park
DeAlba, Doris E., Glen Burnie	Skinner, Doris E., Port Republic
Dunnington, Doris M., Chevy Chase	Spehnkouch, Lucia A., Baltimore
George, Mary E., Mt. Rainier	Stevenson, Marguerite S., Takoma Park
Hartig, Jean M., Washington, D. C.	Thawley, Helene E., Denton
Hill, Millie L., Silver Spring	Tucker, Beatrice L., Abingdon
Huff, Dorothy, Chevy Chase	Waldman, Fredricka L., Washington, D. C.
Iager, Evelyn L., Annapolis	Williams, Helen C., Washington, D. C.
Jacobs, June, Flushing, N. Y.	Wilson, Ethel J., Washington, D. C.
Johnson, Virginia M., Baltimore	

Puncochar, Joseph F., College Park	Strauss, Eleanor R., Baltimore
Purdum, William A., Baltimore	Stuart, Leander S., Bethesda
Raby, Alfred B., Hickory, N. C.	Stull, William D., Madison, N. J.
Ravitch, Irene, Baltimore	Sullivan, William N., Jr., Lawrence, Mass.
Reidy, Kathryn, Chevy Chase	Sylvester, Donald M., Jefferson, Me.
Reynard, George B., Hiram, Ohio	Taylor, J. K., Mt. Rainier
Rice, Robb V., Missoula, Mont.	Teeter, Viola C., Hyattsville
Riley, Mary B., Hyattsville	Terbush, Theron L., Washington, D. C.
Rowell, Ann H., Hyattsville	Terrell, Harriet L., Baltimore
Sachs, George H., Washington, D. C.	Terrell, Isador, Baltimore
Sadowsky, Irving, North East	Terwilliger, W. Bird, Baltimore
Schechter, Milton S., Brooklyn, N. Y.	Thompson, James U., Cambridge
Schenthal, Joseph E., Baltimore	Thompson, Paul H., Baltimore
Schmidt, Oswald, Baltimore	Thrasher, Anne N., Washington, D. C.
Schnebly, Lewis A., Jr., Clear Spring	Tillett, Boone D., Athens, Ga.
Schneider, Roy, Silver Spring	Tillson, Albert H., Arlington, Va.
Schofield, William C., Columbus, Ohio	Tretter, George, Brooklyn, N. Y.
Schultz, Joseph R., Upperco	Turner, Carla S., Takoma Park
Schwab, Frank W., Idana, Kansas	Tuve, Richard L., Washington, D. C.
Scott, Sue G., Baltimore	Tymeson, Sidney W., Takoma Park
Scribner, Bourdon F., Washington, D. C.	Umberger, Edmund H., Lebanon, Pa.
Seltzer, Sarah L., Washington, D. C.	Underwood, Paul C., Takoma Park
Sessions, Ruth W., Takoma Park	Urquhart, Norman R., Lincoln, Ill.
Shank, R. Karl, Hagerstown	Valaer, Peter J., Baltimore
Shaw, Ann B., College Park	Vawter, James H., Laurel
Shear, Cornelius B., Arlington, Va.	Volckhausen, Walter R., New York, N. Y.
Shipley, Catherine I., Harman	Voris, John B., Baltimore
Shirk, Harold G., West Lawn, Pa.	Walker, Earnest A., Hyattsville
Sieling, Fred W., Annapolis Junction	Wallace, David, Barclay
Simonpietri, Andre C., Novum, Va.	Walton, Mary M., Hyattsville
Singer, Louis, Washington, D. C.	Watkins, Grace O., Hyattsville
Sixbey, George L., Laurel	Watkins, Robert S., Jessup
Skelton, Bessie, Hyattsville	Watt, Lois B., Washington, D. C.
Skinner, Geneva K., Takoma Park	Watt, Ralph W., Washington, D. C.
Skinner, Mildred L., Cambridge	Webster, George L., Baltimore
Slocum, Glenn G., Washington, D. C.	Webster, Leroy G., Deal's Island
Small, Florence F., Hyattsville	Welsh, Llewellyn H., Washington, D. C.
Smith, DeWitt C., Takoma Park	Wenzel, Marie E., Laurel
Smith, Dorothy G., Hyattsville	Weyand, Robert W., Brooklyn, N. Y.
Smith, Leonard, Washington, D. C.	Wheeler, Donald H., Silver Spring
Smith, Margaret W., Hyattsville	White, Mildred G., Baltimore
Smith, William H., Baltimore	Whiteman, Thomas M., Washington, D. C.
Snodgrass, Annie L., Takoma Park	Whiting, Eugenia H., Washington, D. C.
Sockrider, Elsie M., Washington, D. C.	Wilkinson, Mabel B., Washington, D. C.
Sonen, Milo W., Washington, D. C.	Williams, Ralph C., Silver Spring
Sookne, Arnold M., Washington, D. C.	Williamson, Marion D., College Park
Spadola, John M., Washington, D. C.	Willingham, Charles B., Washington, D. C.
Spangler, John H., Hagerstown	Wingate, Philip, Baltimore
Speaker, Clare J., Washington, D. C.	Wiseman, Herbert G., Washington, D. C.
Speck, Marvin L., Middletown	Wolfe, John K., Washington, D. C.
Spicer, Helen E., Takoma Park	Wondrack, Arthur J., Washington, D. C.
Stanton, William A., Hyattsville	Yonkers, Genevieve A., Flintstone
Stier, Howard L., Lisbon	Young, George Y., Washington, D. C.
Stimpson, Edwin G., College Heights	Youch, Charles A., Baltimore
Stimson, Jesse L., Washington, D. C.	Zapponi, Paschal P., Wooster, Ohio
Stirton, Alexander J., Washington, D. C.	Zusman, Morris, Brooklyn, N. Y.
Stranahan, Leonard A., Washington, D. C.	



## FRESHMAN CLASS

Abrahams, Henrietta T., E. Orange, N. J.  
 Amadon, Virginia, Washington, D. C.  
 Baylin, Helen R., Baltimore  
 Bland, Mildred A., Suitland  
 Bohman, Katherine H., Hagerstown  
 Buckler, Mary F., Aquasco  
 Bullock, Evelyn A., Baltimore  
 Camalier, Elizabeth F., Washington, D. C.  
 Cogswell, Phyllis J., Washington, D. C.  
 Conners, Marie A., Hyattsville  
 Coyle, Margaret L., Upper Marlboro  
 Crisp, Margaret S., Baltimore  
 Cross, Gail M., Bethesda  
 Curry, Tempe H., Bethesda  
 Davis, Barbara J., Chevy Chase  
 Dennis, Margaret A., Berlin  
 Dippel, Marie D., Baltimore  
 Dorsey, Sara J., Stoakley  
 Downey, Milbrey A., Williamsport  
 Enfield, Marjory L., Forest Hill  
 Farrington, Mary C., Hyattsville  
 Fennell, Beatrice M., Chevy Chase  
 Foster, Virginia M., Elkton  
 Fouche, Dorothy L., Adamstown  
 Graham, Dorothy W., Baltimore  
 Hickman, Martha V., Washington, D. C.  
 Holbrook, Helen P., College Park  
 Huntington, Hannah C., Baltimore  
 Hussong, Dorothy L., Washington, D. C.  
 Jones, Mary E., Hyattsville  
 Kaiser, Robbin V., Annapolis  
 Kraft, Jane L., Washington, D. C.  
 Lang, Alice H., E. Norwalk, Conn.  
 Leighty, Lena L., Washington, D. C.  
 Logan, Mary A., Washington, D. C.  
 Lyon, Elnora L., Baltimore  
 Magdeburger, Kathryn H., Washington, D. C.  
 Mayhew, Elizabeth A., Hyattsville  
 McComas, Lois C., Abingdon  
 McDonough, Rita A., Baltimore  
 Medbery, Dorothy A., Washington, D. C.  
 Menke, Margaret C., Washington, D. C.  
 Miller, Marjorie, Fort Monroe, Va.  
 Monck, Margaret M., Washington, D. C.  
 Mullinix, Esther L., Woodbine  
 Nash, Alice M., Berwyn  
 Nesbitt, Geraldine H., Baltimore  
 Rice, Dorothy E., Washington, D. C.  
 Richmond, Ruth M., Bethesda  
 Robinette, Marie B., Washington, D. C.  
 Rodgers, Helen, Fort Howard  
 Sachs, Evelyn B., Baltimore  
 Singletary, Doris L., Baltimore  
 Smaltz, Margaret H., Washington, D. C.  
 Soper, Ruby E., Washington, D. C.  
 Steward, Isabell K., Laurel  
 Ward, Maxine E., Washington, D. C.  
 Zimmerman, Mary E., Ellicott City

## UNCLASSIFIED AND PART TIME

Burdette, Nellie L., Mt. Airy  
 Finney, Elizabeth D., Laurel  
 Galloway, Rhea M., Lonaconing  
 Gross, Esther B., Sharpsburg  
 Higgins, Ruth G., Hyattsville  
 McCormac, Elizabeth M., Washington, D. C.  
 Shepherd, Claire, Berwyn

## SCHOOL OF LAW

### FOURTH YEAR EVENING CLASS

Applefeld, Irving J., Baltimore  
 Athey, Charles E., Round Bay  
 Becker, James S., Baltimore  
 Bender, William F., Baltimore  
 Bloom, Joseph G., Baltimore  
 Carr, Eberle W., Baltimore  
 Clarke, DeWitt F., Baltimore  
 Cohen, Bernard S., Baltimore  
 Coolahan, Joseph P., Baltimore  
 Dixon, Earl M., Baltimore  
 Graves, Clifford H., Baltimore  
 Houff, Thomas M., Baltimore  
 Jacobson, Alfred T., Baltimore  
 Kaplan, Maurice A., Baltimore  
 Keech, Frank B., Baltimore  
 Linthicum, Sweetser, Linthicum Heights  
 Mattingly, Edward W., Baltimore  
 Mraz, Anton J., Perth Amboy, N. J.  
 Picario, Philip J., Baltimore  
 Power, Gordon G., Baltimore  
 Power, John C., Baltimore  
 Reynolds, Lee B., Baltimore  
 Rouse, James W., Easton  
 Stissel, Carl F., Baltimore  
 Tucker, William R., Baltimore  
 Walker, D. Merle, Baltimore  
 Wesner, Lawrence E., Baltimore

## THIRD YEAR DAY CLASS

Buzzell, Allen E., Sparrows Point  
 Carscaden, William R., Cumberland  
 Cullen, Richard E., Delmar, Del.  
 Ewing, Sherley, Baltimore  
 Gerson, Milton, Frostburg  
 James, William S., Havre de Grace  
 Lipin, Edward J., Pasadena  
 Maginnis, Paul T., Baltimore  
 McFaul, Harry A., Baltimore  
 Meyers, Amos I., Baltimore  
 Moore, Charles D., Baltimore  
 Morton, James C., Linthicum Heights  
 Potts, Charles J., Salisbury  
 Rouse, John G., Jr., Baltimore  
 Schaub, Edward A., Jr., Baltimore  
 Sinskey, Henry L., Jr., Baltimore  
 Struzinski, Henry P., Baltimore  
 Toulal, Jaroslav J., Baltimore  
 Tyler, J. Edward, III, Baltimore  
 Warhol, John, Jr., Mahwah, N. J.  
 Welsh, John T., Cumberland  
 Williams, Robert H., Jr., Baltimore

### THIRD YEAR EVENING CLASS

Athey, William B., II, Severna Park  
 Boyd, J. Frank, Baltimore  
 Boyd, Omar K., Baltimore  
 Cooper, Norman E., Baltimore  
 Daneker, Clayton W., Baltimore  
 Dunn, Sylvan R., Baltimore  
 Dunnington, Frank P., Jr., Baltimore  
 France, Ralph H., Baltimore  
 Gamse, Leroy L. F., Baltimore  
 Goldberg, Herman, Baltimore  
 Harding, Henry J., Jr., Baltimore  
 Higinbotham, Edward D., Bel Air  
 Hoffman, Grace, Baltimore  
 Hopkins, Samuel, Catonsville  
 Jackson, Charles E., Jr., Baltimore  
 Karasik, Abe S., Baltimore  
 Karow, William K., Baltimore  
 Katzenstein, Alvin, Baltimore  
 Kelly, Caleb R., Baltimore  
 Miller, Thomas L., Baltimore  
 Motry, George O., Baltimore  
 Mueller, Henry A., Baltimore  
 Rothschild, Walter, Baltimore  
 Sattler, Eugene J., Baltimore  
 Silverman, Arnold, Baltimore  
 Storm, Edward D., Frederick  
 Sybert, Edward J., Elkridge  
 Thompson, Charles W., Mt. Washington

## SECOND YEAR DAY CLASS

Archer, Robert H., Jr., Bel Air  
 Barbour, John K., Jr., Catonsville  
 Barclay, Frederick H., Jr., Baltimore  
 Barrett, John H., Jr., Baltimore  
 Bartlett, Thomas R., Baltimore  
 Beck, James D., Baltimore  
 Beck, S. Scott, Jr., Chestertown  
 Benjamin, Paul E., Baltimore  
 Bernstein, Leonard S., Baltimore  
 Clark, John L., Ellicott City  
 Colgan, Charles W., Baltimore  
 Earnshaw, Benjamin A., Baltimore  
 Ellis, Joseph A., Hebron  
 Filler, Edwin W., Baltimore  
 Garfunkel, Sylvan A., Savannah, Ga.  
 Gillis, Lee S., St. Michaels  
 Goldstein, Louis L., Prince Frederick  
 Handy, Francis D., Baltimore  
 Harkness, David A., Mutual  
 Hecht, Isaac, Baltimore  
 Jacob, John E., Jr., Baltimore  
 Kirsner, Milton F., Baltimore  
 Long, John W., Fruitland  
 Love, Richard H., Hyattsville  
 Magers, John E., Jr., Ruxton  
 Malkus, Frederick C., Cambridge  
 Meyer, Bernard S., Baltimore  
 Miller, Amols M., Chester, Pa.  
 Murray, Donald G., Baltimore  
 Prettyman, Charles W., Rockville  
 Rascovar, Roy L., Baltimore  
 Riehl, Louis M., Lansdowne  
 Robb, John M., Cumberland  
 Rubin, Jesse J., Baltimore  
 Scherr, Max, Baltimore  
 Sheridan, Hugh L., Baltimore  
 Starr, John E., Hyattsville  
 Tull, Miles T., Marion  
 Wenchel, John P., II, Washington, D. C.  
 Whalin, Cornelius, Hyattsville  
 Williams, T. Bayard, Jr., Baltimore  
 Williamson, George L., Cumberland

### SECOND YEAR EVENING CLASS

Andrew, Thomas G., Baltimore  
 Banks, Talbot W., Baltimore  
 Benson, Alvin L., Westminster  
 Blackhurst, James W., Baltimore  
 Bowles, Martin C., Baltimore  
 Buppert, Doran H., Baltimore  
 Clark, Louis D., Ellicott City  
 Cohen, Irvin H., Baltimore



Cohen, Jerome B., Baltimore  
 Dyer, Harry E., Jr., Havre de Grace  
 Farinholt, Leroy W., Jr., Baltimore  
 Green, Thomas O., Jr., Towson  
 Hopkins, John H., IV, Baltimore  
 Jobson, George J., Catonsville  
 Joyce, Jerome J., Baltimore  
 Kirby, Raymond A., Baltimore  
 Kolker, Fabian H., Baltimore  
 Lassotovitch, Vladimir S., Havre de Grace  
 Levinson, Irvin A., Baltimore  
 Loeser, Richard A., Baltimore  
 Lubinski, Edmund W., Baltimore  
 Macgill, James, Simpsonville

McGreevy, John R., Baltimore  
 McKenrick, Stratford E., Baltimore  
 Plant, Albin J., Baltimore  
 Posner, Louis, Baltimore  
 Rasin, Alexander P., Jr., Chestertown  
 Redmond, James A., Jr., Baltimore  
 Saks, Benson J., Baltimore  
 Siemon, John A., Baltimore  
 Slowik, Lawrence R., Baltimore  
 Tiralla, Henry M., Jr., Baltimore  
 Topper, Bernard C., Baltimore  
 Weir, Albert E., Baltimore  
 Wilson, Frank K., Jr., Baltimore  
 Wisotzki, Clark T., Baltimore

#### FIRST YEAR DAY CLASS

Bloodgood, Joseph H., Baltimore  
 Byrd, Charles M., Baltimore  
 Clark, Leslie J., Lonaconing  
 Clarke, George L., Pikesville  
 Edmondson, Charles E., Cambridge  
 Frailey, Carson G., Emmitsburg  
 Fuller, Frances E., Crisfield  
 Getty, Gorman E., Jr., Lonaconing  
 Goldberg, Harry, Baltimore  
 Jones, Joseph F., Baltimore  
 Jones, Lewis R., Oakland  
 Kalis, Samuel D., Baltimore  
 Kelly, Charles B., Jr., Hamilton  
 Long, Eloise G., Salisbury  
 Lovell, Marker J., New Windsor  
 Monroe, Edward G., Baltimore  
 Oken, Fred, Baltimore  
 Ready, Roland C., Mt. Lake Park

Sallow, William H., Baltimore  
 Scrivener, David S., Washington, D. C.  
 Shaivitz, Phyllis D., Baltimore  
 Silberg, Melvin S., Baltimore  
 Smith, John H., Cumberland  
 Sullivan, John C., Jr., Baltimore  
 Taylor, Alfred F., Darlington  
 Tuerk, Carl E., Baltimore  
 Vogel, Albert T., Baltimore  
 Wasserman, Jerome, Baltimore  
 Watchorn, Arthur W., Millbury, Mass.  
 Waterman, Caroline H., Jacksonville, Fla.  
 Welsh, Barnard T., Rockville  
 Welsh, Paul E., Baltimore  
 White, George W., Baltimore  
 Williams, Lawrence E., Baltimore  
 Zimmerman, Richard E., Frederick

#### FIRST YEAR EVENING CLASS

Alexander, Eugene J., Laurel  
 Bank, Howard M., Baltimore  
 Bielinski, Leon B., Baltimore  
 Bussey, Eugene, Baltimore  
 Care, Harold C., Baltimore  
 Cox, Charles H., Baltimore  
 Douglass, Calvin A., Baltimore  
 Glass, Louis J., Baltimore  
 Hedrick, Thomas H., Baltimore  
 Herrmann, John O., Baltimore  
 Howell, George E., Baltimore  
 Howell, Joseph F., Baltimore  
 Huff, James K., Jr., Forest, Miss.  
 Hunt, Richard G., Baltimore  
 Johnson, Clarence L., Annapolis

Kesmodel, Charles R., Baltimore  
 McCray, Jonathan F., Towson  
 Morfit, Charles C., Jr., Baltimore  
 Ottenheimer, Edwin, Baltimore  
 Paar, Francis W. H., Baltimore  
 Paymer, Leonard, Baltimore  
 Rechner, Charles F., Jr., Baltimore  
 Robertson, Emma S., Baltimore  
 Scanland, Robert B., Chevy Chase  
 Tobler, John O., Baltimore  
 Waller, William L., Annapolis  
 Waterman, Richard H., Catonsville  
 Whayland, Frances E., Baltimore  
 Whiteford, Charles G., Baltimore  
 Yeager, Paul J., Baltimore

#### UNCLASSIFIED EVENING

Coonan, Margaret E., Baltimore  
 Lang, Samuel J., Catonsville

## SCHOOL OF MEDICINE

### GRADUATE STUDENTS

Beck, Frances, Baltimore  
 Carr, C. Jelleff, Baltimore  
 Conley, Carroll L., Baltimore  
 Dozois, K. Pierre, Baltimore

Forman, Sylvan E., Baltimore  
 Painter, Elizabeth E., Baltimore  
 Schenthal, Joseph E., Baltimore

### SENIOR CLASS

Abbott, Thomas G., Baltimore  
 Bank, R. Stanley, Baltimore  
 Barnett, Ernest, New York, N. Y.  
 Bereston, Eugene S., Baltimore  
 Brill, Leonard, Baltimore  
 Burtneck, Lester L., Baltimore  
 Carlson, Carl E., New Haven, Conn.  
 Casanova Díaz, José R., Hato Rey, Puerto Rico  
 Christensen, Roland A., Philadelphia, Pa.  
 Cocimano, Joseph M., Washington, D. C.  
 Cooney, Robert F., Scranton, Pa.  
 Coughlan, Stuart G., Baltimore  
 Daily, Louis E., Baltimore  
 D'Alessio, Charles M., Derby, Conn.  
 D'Amico, Thomas V., Newark, N. J.  
 Davidson, Eli, New York, N. Y.  
 Deradorian, Neshon E., New Britain, Conn.  
 Diggs, Everett S., Baltimore  
 Eisner, William M., Brooklyn, N. Y.  
 Ellison, Emanuel S., Baltimore  
 Ensor, Helen R., Baltimore  
 Feldman, Philip M., Brooklyn, N. Y.  
 Finn, John H., Pittsfield, Mass.  
 Frenkil, James, Baltimore  
 Frohman, Isaac, Baltimore  
 Gehlert, Sidney R., Baltimore  
 Gillespie, John L., Arlington, N. J.  
 Goffin, Herbert, New York, N. Y.  
 Goldberg, Sigmund, Baltimore  
 Gordon, William C., Brooklyn, N. Y.  
 Gore, Robert J., Baltimore  
 Gottdiener, Elvin E., Baltimore  
 Greenwald, Frank, New York, N. Y.  
 Hahn, Charles S., Brooklyn, N. Y.  
 Hedrick, Grover C., Jr., Beckley, W. Va.  
 Highstein, Benjamin, Baltimore  
 Hochfeld, Leo, New York, N. Y.  
 Hodgson, Eugene W., Houston, Pa.  
 Hoffman, Charles W., Jr., Baltimore  
 Humphries, William C., Baltimore  
 Insley, James K., Jr., Baltimore  
 Jackson, Samuel, New York, N. Y.  
 Jacobson, Alan, Baltimore  
 Johnston, Clarence F., Jr., Baltimore  
 Jones, James P., Pennsboro, W. Va.  
 Kadan, J. Earl, Takoma Park  
 Kagen, Gordon A., Reading, Pa.

Kaltreider, D. Frank O., Jr., Red Lion, Pa.  
 Kaplan, Isadore, Baltimore  
 Kaplan, Jack A., Brooklyn, N. Y.  
 Kaplan, Nathan, Baltimore  
 Katz, Albert H., Baltimore  
 Katz, Isadore, Brooklyn, N. Y.  
 Kemick, Irvin B., Baltimore  
 Klemkowski, Irvin P., Baltimore  
 Kolman, Lester N., Baltimore  
 Kunkowski, Mitchell F., Baltimore  
 Leskin, Louis W., Brooklyn, N. Y.  
 Levine, Leonard W., Hartford, Conn.  
 Levinson, Leonard J., Brooklyn, N. Y.  
 Linhardt, Elmer G., Eastport  
 Lisansky, Ephraim T., Baltimore  
 Long, William B., Jr., Princess Anne  
 Lubinski, Chester J., Baltimore  
 Mackowiak, Stephen C., Dundalk  
 Manieri, Frank V., Baltimore  
 Marino, Irene T., Allegany, N. Y.  
 Matheke, Otto G., Jr., Newark, N. J.  
 Meyer, Milton J., Jamaica, N. Y.  
 Muller, Stephen E., Bradshaw  
 Muse, Joseph E., Baltimore  
 Myers, Philip, Baltimore  
 Nataro, Maurice, Newark, N. J.  
 Owens, Richard S., Jr., Roanoke, Va.  
 Pass, Isidore E., Baltimore  
 Pavlatos, August C., Lancaster, Pa.  
 Perlman, Lawrence, Ridgewood, N. Y.  
 Piccolo, Pasquale A., New Haven, Conn.  
 Pokrass, Frederick P., Towanda, Pa.  
 Resnick, Elton, Baltimore  
 Revell, Samuel T. R., Jr., Louisville, Ga.  
 Rigdon, Henry L., Aberdeen  
 Robins, Isadore M., Luzerne, Pa.  
 Robinson, Martin H., Philadelphia, Pa.  
 Rochkind, Reuben, Baltimore  
 Roseman, Ephraim, Baltimore  
 Rubin, Morris, New Haven, Conn.  
 Rudman, Gilbert E., Baltimore  
 Safran, Sidney, Baltimore  
 Sakowski, John P., Bayonne, N. J.  
 Sartorius, Norman E., Jr., Pocomoke  
 Scarborough, Clarence P., Jr., Delta, Pa.  
 Schmidt, Jacob E., Baltimore  
 Seegar, John K. B. E., Jr., Baltimore  
 Seidel, Joshua, Baltimore



Semoff, Milton C. F., Sea Gate, New York Harbor, N. Y.  
 Shapiro, Abraham A., Baltimore  
 Shear, Meyer R., Baltimore  
 Spielman, Morton M., Baltimore  
 Stapen, Mannie, Brooklyn, N. Y.  
 Statman, Bernhardt J., Newark, N. J.  
 Steiner, Albert, Baltimore  
 Sullivan, Thomas J., New York, N. Y.  
 Suwalsky, Sydney, Hartford, Conn.  
 Trupp, Mason, Baltimore

Weems, George J., Baltimore  
 Weiss, Henry W., Ellenville, N. Y.  
 Whitworth, Frank D., Westernport  
 Wilkin, Mabel G., Brenham, Texas  
 Williams, Richard J., Cumberland  
 Williams, Robert R., Rochester, N. Y.  
 Wolff, Eldridge H., Cambridge  
 Woodrow, Jack H., Yonkers, N. Y.  
 Zack, Frank A., Webster, Mass.  
 Zeligman, Israel, Baltimore

#### JUNIOR CLASS

Abarbanel, Milton G., Jersey City, N. J.  
 Abramson, Daniel J., Baltimore  
 Applefeld, Willard, Baltimore  
 Baum, Max, Baltimore  
 Bonner, Robert A., Jr., Waterbury, Conn.  
 Borden, Melvin N., Baltimore  
 Bowers, John Z., Catonsville  
 Bradley, Stanley E., Baltimore  
 Brooks, Wilbur S., New York, N. Y.  
 Brown, Manuel, Baltimore  
 Bunting, John J., Clifton, N. J.  
 Callahan, Timothy A., Jr., Bel Air  
 Chance, Burton, Jr., Radnor, Pa.  
 Cohen, Hilliard, Baltimore  
 Collieran, Harold L., Jessup, Pa.  
 Coolahan, John F., Baltimore  
 Cooper, Donald D., Towson  
 Costas, Jaime L., Ponce, Puerto Rico  
 Crawford, Robert C., Baltimore  
 Dausch, Michael J., Baltimore  
 Dodd, William A., Baltimore  
 Dolfman, Victor, Philadelphia, Pa.  
 Eichert, Arnold H., Woodlawn  
 Feder, Aaron, Jackson Heights, N. Y.  
 Fox, Lester I., Haverhill, Mass.  
 Fox, Samuel L., Baltimore  
 Gareis, Louis C., Baltimore  
 George, Joseph M., Jr., Sudlersville  
 Gertman, Samuel, Baltimore  
 Gibel, Harry, Brooklyn, N. Y.  
 Ginsberg, Milton, Baltimore  
 Glassman, Edward L., Baltimore  
 Goodman, Louis E., Jr., Baltimore  
 Goodman, Sylvan C., Baltimore  
 Gottdiener, Florence H. H., Baltimore  
 Govons, Sidney R., Baltimore  
 Graff, Frederick L., Parkersburg, W. Va.  
 Guyton, William L., Baltimore  
 Haase, John H., Baltimore  
 Harris, Sidney, Paterson, N. J.  
 Hayleck, Mary L., Baltimore  
 Horky, John R., Bel Air  
 Januszeski, Francis J., Baltimore  
 Katz, Milton A., Westminster  
 Kelmenson, Harry, Baltimore

Knox, John J., Gettysburg, Pa.  
 Kotleroff, Jerome S., Brooklyn, N. Y.  
 Kump, Albert B., Bridgeton, N. J.  
 Kurtz, Gerald I., Paterson, N. J.  
 LaMar, David W., Middletown  
 Lauve, Celeste C., Baltimore  
 Layden, Milton, Baltimore  
 Lenker, Luther A., Harrisburg, Pa.  
 Lipsitz, Morton H., Baltimore  
 Lopez, Hilton L., Mayaguez, Puerto Rico  
 Lumpkin, William R., Baltimore  
 Michaelson, Ernest, Bladensburg  
 Milholland, Arthur V., Baltimore  
 Miller, Clarence L., Hannibal, Mo.  
 Miller, Royston, Baldwin  
 Miniszek, James H., Baltimore  
 Molofsky, Leonard C., Baltimore  
 Post, Laurence C., Buckhannon, W. Va.  
 Powell, Geraldine K., Baltimore  
 Rizzolo, John, Newark, N. J.  
 Roman, Paul, Baltimore  
 Rosselló, Juan A., Ponce, Puerto Rico  
 Rothkopf, Henry, Ellenville, N. Y.  
 Sabatino, Bernard J., Baltimore  
 Sarajian, Aram M., Ridgefield Park, N. J.  
 Schaefer, John F., Baltimore  
 Schammel, Adam J., Baltimore  
 Scherlis, Sidney, Baltimore  
 Schlesinger, Robert A., Flushing, N. Y.  
 Schmulovitz, Maurice J., Baltimore  
 Scott, John M., Baltimore  
 Sevcik, Charles V., Baltimore  
 Sheppard, Robert C., Baltimore  
 Siegel, Edward, Poughkeepsie, N. Y.  
 Silberman, Donald J., Birmingham, Ala.  
 Smith, John P., Baltimore  
 Sprei, Emanuel, New York, N. Y.  
 Stein, Aaron, Baltimore  
 Steinberg, Morris W., Baltimore  
 Swiss, Adam G., Baltimore  
 Thomas, Bernard O., Frederick  
 Thompson, James U., Cambridge  
 Thompson, Winfield L., Rehobeth  
 Urlock, John P., Jr., Baltimore  
 Vollmer, Frederick J., Baltimore

Wagner, John A., Baltimore  
 Warres, Herbert L., Brooklyn, N. Y.  
 Way, John E., Beaufort, N. C.  
 Welfeld, Alvan, Baltimore  
 White, Harry F., Jr., Baltimore  
 White, Samuel C., Baltimore

Winer, Albert S., Baltimore  
 Woodward, Theodore E., Westminster  
 Worthington, Richard W., Jr., Baltimore  
 Wulwick, Michael, Brooklyn, N. Y.  
 Yaffe, Kennard L., Baltimore

#### SOPHOMORE CLASS

Abrahams, John J., Jr., Port Deposit  
 Algire, Glenn H., Baltimore  
 Baylus, Herman, Baltimore  
 Beck, Harry M., Baltimore  
 Berman, Edgar F., Baltimore  
 Bernstein, Aaron, Baltimore  
 Bernstein, Albion O., New York, N. Y.  
 Bess, Elizabeth G., Keyser, W. Va.  
 Bloom, Max R., Pittsburgh, Pa.  
 Brezinski, Edward J., Perth Amboy, N. J.  
 Briele, Henry A., Baltimore  
 Brodsky, Bernard, Brooklyn, N. Y.  
 Cianos, James N., Baltimore  
 Coffman, Robert T., Keyser, W. Va.  
 Cohen, Frank S., Baltimore  
 Corbitt, Richard W., Parkersburg, W. Va.  
 Cunningham, Raymond M., Baltimore  
 Filtzer, David L., Baltimore  
 Fink, Francis T., Baltimore  
 Freed, Arnold U., Baltimore  
 Fusting, William H., Baltimore  
 Gaver, Leo J., Myersville  
 Goldberg, Raymond B., Baltimore  
 Goldberg, Sylvan D., Baltimore  
 Grier, George S., III, Milford, Del.  
 Grott, Harold A., Baltimore  
 Hainowitz, Samuel I., Philadelphia, Pa.  
 Hartman, Oscar, Baltimore  
 Hartz, Alvin S., Baltimore  
 Heimoff, Leonard L., New York, N. Y.  
 Hooker, Charles B., Takoma Park  
 Hutchins, Thomas M., Bowens  
 Isaacson, Benjamin, Hyattsville  
 Jandorf, Reuben D., Baltimore  
 Jannarone, Lewis H., Belleville, N. J.  
 Jones, Charles W., Baltimore  
 Kairys, David, Baltimore  
 Kammer, William H., Jr., Baltimore  
 Kappelman, Melvin D., Baltimore  
 Keister, Philip W., Lansdowne  
 Kerr, James P., Boyd  
 Kiely, James A., Cortland, N. Y.

Kinnamon, Howard F., Jr., Easton  
 Kleiman, Bernard S., Baltimore  
 Kurland, Albert A., Baltimore  
 Kyle, Henry H., Waterbury  
 Lapinsky, Herbert, Brooklyn, N. Y.  
 Lavenstein, Arnold F., Baltimore  
 Layman, William T., Hagerstown  
 Leitch, William H., Friendship  
 Magness, Stephen L., Baltimore  
 Magruder, John R., Baltimore  
 Marks, Irving L., Baltimore  
 McClafferty, William J., Jr., West Warwick, R. I.  
 McLaughlin, Francis J., Towson  
 Meyer, Alvin F., Brooklyn, N. Y.  
 Miller, Irving, New York, N. Y.  
 Miller, William S., Baltimore  
 Moran, John A., Conway, Mass.  
 Nuttall, James B., Sharptown  
 Palmer, David W., Wheeling, W. Va.  
 Polek, Melvin F., Baltimore  
 Reimann, Dexter L., Baltimore  
 Rochberg, Samuel, Passaic, N. J.  
 Ruzicka, Edwin R., Baltimore  
 Sadove, Max S., Baltimore  
 Scher, Isadore, Baltimore  
 Sexton, Thomas S., Sistersville, W. Va.  
 Siegel, Maurice, Brooklyn, N. Y.  
 Smoak, Philip L., Tampa, Fla.  
 Solarz, Sylvan D., Baltimore  
 Spiegel, Herbert, McKeesport, Pa.  
 Steger, William J., Wheeling, W. Va.  
 Stevens, Leland B., Millington  
 Tartikoff, George, Brooklyn, N. Y.  
 Thomas, Ramsay B., Towson  
 Wallenstein, Leonard, Baltimore  
 Wanner, Jesse R., Jr., Salisbury  
 Whitworth, Fuller B., Westernport  
 Wilder, Milton J., Ferndale  
 Wilner, Solomon, New York, N. Y.  
 Zalis, Daniel L., Baltimore

#### FRESHMAN CLASS

Andrews, S. Ralph, Jr., Elkton  
 Baier, John C., Mt. Hays  
 Bailey, Walter L., York, Pa.  
 Barker, Daniel C., Niantic, Conn.

Beacham, Edmund G., Baltimore  
 Biehl, Harold P., Frederick  
 Borden, Jesse N., Baltimore  
 Brinsfield, Irving C., Vienna



Caplan, Lester H., Baltimore  
 Clifford, Robert H., Jr., Mountain Lakes, N. J.  
 Cole, John T., Warren, Ohio  
 Correll, Paul H., Catonsville  
 Daue, Edwin O., Jr., Silver Spring  
 DeLuca, Joseph, Bristol, R. I.  
 DonDiego, Leonard V., Brooklyn, N. Y.  
 Duffy, William C., Baltimore  
 Dwyer, James R., Renovo, Pa.  
 Fertner, Martin L., Red Lion, Pa.  
 Freeman, James A., Jr., West Union, W. Va.  
 Gassaway, William F., Ellicott City  
 Glick, Irving V., New York, N. Y.  
 Guzmán-López, Luis R., San Juan, Puerto Rico.  
 Hecht, Morton, Jr., Baltimore  
 Henning, Emil H., Jr., Baltimore  
 Heyman, Albert, Baltimore  
 Hooton, Elizabeth L., Hyattsville  
 Hope, Daniel, Jr., Ellicott City  
 Howell, Thomas P., Ellerbe, N. C.  
 Igartua-Cardona, Susana, Aguadilla, Puerto Rico  
 Inloes, Benjamin H., Jr., Baltimore  
 Johnson, Robert D., Annapolis  
 Karns, James R., Baltimore  
 Kirchick, Julian G., Brooklyn, N. Y.  
 Kohn, Schuyler G., Baltimore  
 Krieg, Edward F., Baltimore  
 Lartz, Robert E., Sharon, Pa.  
 Ling, William S. M., Fatshan, China  
 Livingood, William C., Waynesboro, Pa.  
 Loker, Frank F., Leonardtown  
 Maccubbin, Harry P., Baltimore  
 Markline, Simeon V., White Hall  
 Martin, Clarence W., II, Baltimore  
 Maryanov, Alfred R., Brooklyn, N. Y.  
 Mathers, Daniel H., Annapolis  
 McClung, James E., Baltimore  
 McClung, William D., Richwood, W. Va.  
 McDaniel, George C., Baltimore  
 McKinnon, William J., Maxton, N. C.  
 Meade, Forest C., Hyattsville  
 Miceli, Joseph, Baltimore

#### SPECIAL STUDENT

Snyder, Tillie, Baltimore

#### MEDICAL ART STUDENTS

Ezekiel, Josephine V., San Anselmo, Cal.  
 Krulewitz, Jeanette G., Baltimore

Miller, Frank W., Catonsville  
 Sage, Robert A., Des Moines, Iowa

#### MEDICAL TECHNOLOGIST

Zimmerman, Grace I., Schaefferstown, Pa.

Molz, Edward L., Baltimore  
 Murphy, Frederick E., Jr., Jesup, Ga.  
 Muse, William T., Baltimore  
 Myers, G. Roger, Jr., Hurlock  
 Odiorne, Philip W., Coopers Mills, Me.  
 O'Hara, James F., Canton, Ohio  
 Pasamanick, Benjamin, Brooklyn, N. Y.  
 Picó, Guillermo, Hato Rey, Puerto Rico  
 Pierpont, Ross Z., Woodlawn  
 Platt, William, Baltimore  
 Pollock, Arthur E., Gallitzen, Pa.  
 Posner, Leonard, Brooklyn, N. Y.  
 Pound, John C., Jr., Baltimore  
 Quail, Thomas H., Baltimore  
 Rath, Maurice M., Newark, N. J.  
 Rees, David T., Jr., Keyser, W. Va.  
 Rhode, Charles M., Baltimore  
 Richter, Conrad L., Baltimore  
 Robinson, Raymond C. V., Baltimore  
 Roop, Donald J., New Market  
 Rothschild, Carl E., Chefoo, China  
 Russell, Thomas E., Jr., Frederick  
 Russillo, Philip J., Annapolis  
 Sappington, Richard C., Libertytown  
 Schlesinger, George G., New York, N. Y.  
 Sloan, Joseph W., Bayonne, N. J.  
 Smith, Benedict F., Baltimore  
 Smith, James B., Baltimore  
 Squillante, Orlando J., Warren, R. I.  
 Stayton, Howard N., Jr., Wilmington, Del.  
 Strayer, Webster M., Jr., Baltimore  
 Supik, William J., Baltimore  
 Tankin, Louis H., Baltimore  
 Thompson, Alexander F., Troy, N. C.  
 Thompson, Raymond K., Riverdale  
 Tompakov, Samuel, Baltimore  
 Townshend, Wilfred H., Jr., Baltimore  
 Trevor, William, Baltimore  
 Triplett, W. Carryl, St. Marys, W. Va.  
 Waite, Merton T., Odenton  
 Wilkins, Jesse L., Pocomoke City  
 Williams, Richard T., Waterbury  
 Wilson, Harry T., Jr., Baltimore  
 Wolff, William I., New York, N. Y.  
 Zinkin, Solomon, Lakewood, N. J.

## SCHOOL OF NURSING

### GRADUATE STUDENTS

Bowling, Vernice L., Elm City, N. C.  
 Dodson, Ruth E., Baltimore  
 Johannes, Norma L., Pekin, Ill.  
 Lubinski, Sophie A., Baltimore  
 Magaha, Annabelle L., Frederick

Miller, Hazel A., Fawn Grove, Pa.  
 Rose, Margaret B., Atlanta, Ga.  
 Thompson, Ruby J., Logan, W. Va.  
 Wicker, Virginia D. C., Danville, Va.

### SENIOR CLASS

Banes, Mary V., Manokin  
 Bosley, Wanda D., White Marsh  
 Carpenter, Catherine E., Waverly, Va.  
 Cornelius, Sarah, Baltimore  
 Cramer, Mildred E., Walkersville  
 Dallmus, Esther M., Baltimore  
 Fadeley, Anne E., Havre de Grace  
 Hersh, Naomi G., Manchester  
 Hooe, Mina G., Charles Town, W. Va.  
 Kautz, Marjorie L., Somerset, Penna.  
 Kluka, Mary, Farrell, Penna.  
 Knight, Sallie F., Courtland, Va.  
 Lewis, Edith E., Havre de Grace  
 Mattson, Evelyn L., Baltimore  
 McArthur, Muriel H., Awendaw, S. C.  
 Moyer, Louise M., Goldsboro, N. C.  
 O'Connor, Beatrice P., Sanford, Fla.  
 Parks, Willye F., Parksley, Va.

Pennington, Rose, Bel Air  
 Pilgrim, Beatrice L., Chambersburg, Pa.  
 Quarterma, Lena W., Nicholls, Ga.  
 Rayme, Carolyn R., Fullerton  
 Rudisill, Mary L., Iron Station, N. C.  
 Sappington, Frances V., Hagerstown  
 Scarborough, Dusetta E., Street  
 Shaffer, Charlotte E., Hampstead  
 Sherrill, Evelyn F., Sparks  
 Skinner, Mary I., Shepherdstown, W. Va.  
 Slick, Jane I., Hagerstown  
 Stauffer, Eleanor F., Cardiff  
 Strickland, Rose E., Curwinstown, Penna.  
 Sutton, Edna E., Goldsboro, N. C.  
 Toom, Dorothy, Baltimore  
 Turner, Margaret C., Mayodan, N. C.  
 Wagner, Helen K., Barrackville, W. Va.  
 Wilson, Mabel J., Baltimore

### INTERMEDIATE CLASS

Albright, Ann E., Nanticoke  
 Bates, Victoria W., Greenville, S. C.  
 Baughman, Anna M., Somerset, Penna.  
 Bowling, Ada G., Elm City, N. C.  
 Breedlove, Annie M., Rocky Mount, N. C.  
 Burbage, Katherine E., Salisbury  
 Coleman, Dorothy E., Livermore, Penna.  
 Coleman, Myrtle A., Baltimore  
 Connelly, Nancy V., Rising Sun  
 Dees, Mary A., Goldsboro, N. C.  
 Dixon, Dorothy L., Wilmington, N. C.  
 Eckenrode, Mary R., Manchester  
 Ensor, Beatrice F., Westminster  
 Finks, Ruth A., Marshall, Va.  
 Gambill, Treva L., Bel Air  
 Garrison, Alice V., Washington, D. C.  
 Graham, Carola B., Hampstead  
 Hanna, Lois C., Mount Solon, Va.  
 Haugh, Gwendolyn, Upperco

Hedrick, Anna Lee, Beckley, W. Va.  
 Kalar, Nelda, Westminster  
 Kalbaugh, Mary E., Luke  
 Kroh, Louise E., Bradshaw  
 Llewellyn, Anne P., Cockeysville  
 Mays, Sara J., Cockeysville  
 McNabb, Lena, Greeneville, Tenn.  
 Monath, Vivian V., Hagerstown  
 Selkamaa, Ingrid E., Baltimore  
 Stephens, Katherine E., Hertford, N. C.  
 Stephenson, Doris V., Baltimore  
 Streett, Flora M., Street  
 Terry, Virginia A., Washington, D. C.  
 Tharpe, Iva L., Bel Air  
 Walker, Alice J., Ellicott City  
 Wert, Janice M., Sparrows Point  
 Wilson, Katherine, Randallstown  
 Winfield, Irma H., Rohrsersville  
 Yeager, Susan M., Thomas, W. Va.

### JUNIOR CLASS

Bennington, Margaret E., Delta, Penna.  
 Clark, Mary S., Brunswick, Ga.  
 Dorsett, Frances E., Indian Head  
 Foster, Lucille E., Beckley, W. Va.  
 Hoffman, Helen M., Clarksburg, W. Va.

Hollister, Louise M., Denton  
 Magruder, Catherine B., Baltimore  
 Roach, Mary J., Hagerstown  
 Travers, Marion E., Nanticoke



## PROBATION CLASS

Beall, Margaret D., Edgewater  
Bolyard, Ruth L., Grafton, W. Va.  
Brayshaw, Katherine H., Smithfield, Va.  
Calladine, Virginia J., Niagara Falls,  
N. Y.  
Clark, Elizabeth G., Havre de Grace  
Conley, Virginia C., Baltimore  
Conyers, Rachel M., Wilson, N. C.  
Craven, Nancy L., Asheboro, N. C.  
Culler, Margaret O., Frederick  
Danforth, Dorothy M., Baltimore  
Davis, Shirley M., Baltimore  
Doyle, Thelma C., Lonaconing  
Feaser, Grace E., Littlestown, Penna.  
Foster, Marguerite W., Sparks  
Grammer, Julia J., Waverly, Va.  
Grant, Catherine E., Live Oak, Fla.  
Grossnickle, Mildred M., Myersville

Harris, Mary E., Tampa, Fla.  
Hayes, Mary G., Davidsonville  
Keller, Mary E., Bel Air  
Lee, Margaret M., Glen Burnie  
Lloyd, Charlotte A., Galetton, Penna.  
Long, Audrey N., Lynchburg, Va.  
Marshall, Lolah H., Baltimore  
Marslander, Ruth C., Beaufort, N. C.  
Mullan, Mary E., Baltimore  
Remke, Pauline I., Wheeling, W. Va.  
Richardson, Virginia B., Waverly, Va.  
Roe, Jeanette, Port Deposit  
Shaff, Dorothy E., Jefferson  
Tucker, Kathleen H., Galesville  
Umphlett, Myra I., Winfall, N. C.  
Vandevoort, Susan H., Middletown, Penna.  
Wilson, Margaret F., Baltimore

## SCHOOL OF PHARMACY

### GRADUATE STUDENTS

Bellman, Frank A., Baltimore  
Cohen, Bernard C., Baltimore  
Cross, John M., Little Falls, N. J.  
Cwalina, Gustav E., Baltimore  
DeDominicis, Amelia C., Baltimore  
Dunker, Melvin F. W., Baltimore  
Foster, Carroll P., Baltimore  
Gilbert, Loamie M., Jr., Benson, N. C.  
Grove, Donald C., Baltimore  
Hunt, William H., Baltimore  
Keyes, Winifred, A., W. Missoula, Mont.  
Levin, Nathan, Baltimore

McNamara, Bernard P., Baltimore  
Messina, Julius A., Baltimore  
Miller, Howard A., Rochester, N. Y.  
Millett, Sylvia, Pen-Mar, Pa.  
Moskey, Thomas A., Jr., Washington, D. C.  
Purdum, William A., Baltimore  
Rice, Robb V., Baltimore  
Smith, William H., Jr., Baltimore  
Thompson, Paul H., Baltimore  
Tramer, Arnold, Baltimore  
Youch, Charles A., Baltimore

### SENIOR CLASS

Allen, Benjamin F., Baltimore  
Alliker, Morris J., Baltimore  
Alperstein, Reuben R., Baltimore  
Beck, Sylvan E., Baltimore  
Bliden, Abraham, Baltimore  
Brune, Richard E., Baltimore  
Cermak, Jerome J., Baltimore  
Cohen, Hershel, Baltimore  
Damico, Samuel, Baltimore  
Dawson, Leroy O., Baltimore  
Einbinder, Sylvan P., Baltimore  
Ellerin, Albert A., Baltimore  
Enten, Harry, Baltimore  
Feret, Julius W., Baltimore  
Fish, Herman J., Baltimore  
Friedman, Charles S., Grafton, W. Va.  
Glickman, Shirley M., Baltimore  
Hanna, William M., Baltimore  
Hoffman, Sylvan A., Baltimore

Kaminski, Felix H., Baltimore  
Karpa, Jerome J., Baltimore  
Kellough, Elmer R., Jr., Cumberland  
Kobin, Benny, Baltimore  
Levy, Abraham M., Baltimore  
Levy, Frank F., Baltimore  
Libowitz, Aaron M., Baltimore  
Lieb, Frank J., Baltimore  
Mayer, Alexander M., Baltimore  
McGinity, F. Rowland, Baltimore  
Merkel, Henry, Baltimore  
Miller, Milton, Baltimore  
Miller, Solomon, Baltimore  
Mindell, Charles, Baltimore  
Morgenstern, Emma L., Woodlawn  
Mouat, Gordon A., Baltimore  
Musacchio, Leo M., Baltimore  
Myers, Irvin L., Baltimore  
Neutze, John F., Baltimore

Nurkin, Bernice V., Baltimore  
Purdum, Frank L., Baltimore  
Rabinowitz, Irving W., Baltimore  
Rapoport, Leonard, Baltimore  
Raudonis, John A., Hudson, N. H.  
Rosenfeld, Israel A., Baltimore  
Rutkowski, Edward V. P., Baltimore  
Santoni, Daniel A., Baltimore  
Sapperstein, Edward I., Baltimore  
Sborofsky, Isadore, Baltimore  
Scherr, Melvin G., Baltimore  
Schumm, Frederick A., Baltimore

### JUNIOR CLASS

Aaronson, Alfred I., Baltimore  
Beam, Merlin A., Garrison  
Bixler, Richard S., New Windsor  
Cohen, Bernard I., Baltimore  
Colvin, Ralph, Baltimore  
Combs, Joseph L., Jr., Baltimore  
Crane, Warren E., Loch Arbour, N. J.  
DiGristine, Charles L., Baltimore  
Edlavitch, Sam, Baltimore  
Floyd, Melvin L., Catonsville  
Fribush, Sidney, Baltimore  
Gakenheimer, Walter C., Catonsville  
Galley, Roland P., Baltimore  
Gendason, Harry B., Baltimore  
Giller, Morris, Baltimore  
Ginaitis, Alphonsus S., Baltimore  
Gregorek, Frank J., Baltimore  
Hager, George P., Jr., Baltimore  
Hamlin, Kenneth E., Jr., Baltimore  
Heyman, Bernice, Baltimore  
Hopkins, Carville B., Annapolis  
Jarowski, Charles, Baltimore  
Jones, Cyrus F., Baltimore  
Kaminkow, Joseph, Baltimore  
Katz, Emanuel O., Baltimore  
Katz, Morton, Baltimore  
Kelley, Gordon W., Baltimore  
Kosakowski, Chester G., Baltimore

Seechuk, William W., Baltimore  
Semer, Gerald M., Baltimore  
Silverman, Irvin I., Baltimore  
Tompakov, Sylvan, Baltimore  
Traband, Millard T., Baltimore  
Turner, Albert F., Baltimore  
Walb, Winfield A., Baltimore  
Wasilewski, Theodore J., Baltimore  
Weiner, David, Baltimore  
Weisberg, Ruth R., Baltimore  
Winn, Solomon, Baltimore  
Zenitz, Bernard L., Baltimore

Levin, Benjamin S., Baltimore  
Levin, Jacob B., Baltimore  
Levin, Norman J., Baltimore  
Levy, Bernard, Baltimore  
Loftus, Howard E., Dundalk  
Matelis, Olga P., Baltimore  
Morgenstern, William A., Jr., Woodlawn  
Muehlhause, Ruth V., Baltimore  
Novak, Arthur F., Baltimore  
Oleszczuk, Melvin J., Baltimore  
Pearlman, Albert, Baltimore  
Pressman, Isadore, Baltimore  
Pucklis, Frank S., Baltimore  
Rhode, John G., Baltimore  
Richman, Jacob L., Baltimore  
Rosenberg, Morris, Baltimore  
Schade, Joseph H., Westernport  
Silverstein, Bernard, Baltimore  
Stoler, Myer, Baltimore  
Sussman, Bernard, Baltimore  
Thompson, Robert E., Waubay, S. D.  
Wachsman, Irvin L., Baltimore  
Waxman, Milton M., Baltimore  
Webster, Thomas C., Baltimore  
Wich, Joseph C., Baltimore  
Young, George I., Catonsville  
Zerofsky, Harold, Baltimore  
Zetlin, Henry P., Baltimore

### SOPHOMORE CLASS

Alessi, Alfred H., Baltimore  
Baker, Daniel S., Baltimore  
Binstock, Albert, Baltimore  
Cohen, Harry, Baltimore  
Dobropolski, Anthony J., Baltimore  
Dorsch, Joseph U., Baltimore  
Folus, Irving H., Baltimore  
Francik, Joseph, Baltimore  
Freedman, Leonard, Baltimore  
Ginsberg, Samuel H., Baltimore  
Glaser, Louis L., Baltimore  
Golditch, Henry M., Baltimore  
Gruz, Nathan I., Baltimore

Hackett, Angela R., Baltimore  
Heneson, Irving J., Baltimore  
Mask, Jerome, Baltimore  
Massing, David, Baltimore  
Mendelsohn, Daniel, Relay  
Miller, Manuel, Baltimore  
Mutchnik, Melvin, Baltimore  
Okrasinski, Joseph L., Baltimore  
Parker, Katherine J., Baltimore  
Passen, Lillian, Baltimore  
Rosenthal, Alvin, Baltimore  
Rostacher, Harry L., New York, N. Y.  
Sabatino, Louis T., Baltimore



Sachs, Albert, Baltimore  
 Sama, Mario A., Baltimore  
 Sapperstein, Louis, Baltimore  
 Shalowitz, Marion, Baltimore  
 Ichniowski, William M., Baltimore  
 Jacobs, Eugene, Baltimore  
 Kamanitz, Irvin L., Baltimore

Kline, Sidney, Baltimore  
 Lieberman, Lawrence L., Front Royal, Va.  
 Snyder, Nathan M., Baltimore  
 Tolley, Leonard J., Brooklyn Park  
 Weinstein, Daniel D., Baltimore  
 Wiener, Maurice, Baltimore

#### FRESHMAN CLASS

Allen, Donald A., Baltimore  
 Balassone, Francis S., Thomas, W. Va.  
 Bergartt, Elmar B., Baltimore  
 Bertrand, Edith E., Baltimore  
 Caplan, Clarice, Baltimore  
 Celozzi, Matthew J., Baltimore  
 Cohen, Harry I., Baltimore  
 Cohen, Samuel, Baltimore  
 Cooper, Madeleine C., Denton  
 Council, Wilford A. H., Jr., Baltimore  
 DiGristine, Mary R., Baltimore  
 Eberling, Vincent B., Baltimore  
 Edyvean, John H., Towson  
 Ehudin, Herbert, Baltimore  
 Feinstein, Bernard S., Baltimore  
 Fine, Joseph J., Baltimore  
 Goldberg, Albert, Baltimore  
 Goldstein, Armand M., Baltimore  
 Greenberg, Joseph, Baltimore  
 Gubnitsky, Albert, Baltimore  
 Gumenick, Leonard, Baltimore  
 Hammel, Katherine M., Baltimore  
 Harris, Samuel, Baltimore  
 Jaworski, Melvin J., Baltimore  
 Kahn, Morton, Baltimore  
 Kamenetz, Irvin, Baltimore  
 Kasik, Frank T., Jr., Raspeburg  
 Kessler, Edward L., Catonsville  
 Kursvietis, Anthony J., Baltimore  
 Lassahn, Norbert G., Baltimore

Lavinka, Ruth, Ellicott City  
 Lerman, Philip H., Baltimore  
 Levin, Leon P., Baltimore  
 Levin, Melvin, Baltimore  
 Levy, Irving, Annapolis  
 Markowitz, Albert, Baltimore  
 Mayer, Maurice V., Baltimore  
 Miller, Edward, Baltimore  
 Morgenroth, Victor H., Jr., Baltimore  
 Phillips, Emerson C., Salisbury  
 Phillips, Thaddeus T., Baltimore  
 Poklis, Alphonse, Sparrows Point  
 Richman, Philip F., Annapolis  
 Rosen, Donald M., Baltimore  
 Sachs, Norman R., Baltimore  
 Sandler, Solomon, Baltimore  
 Schlaen, Mildred, Baltimore  
 Shear, Robert, Baltimore  
 Shook, Joseph W., Baltimore  
 Siegel, Harold, Baltimore  
 Silberg, Edgar M., Baltimore  
 Simonoff, Robert, Baltimore  
 Smith, Daniel E., Catonsville  
 Sowbel, Irving, Baltimore  
 Spangler, Kenneth G., Baltimore  
 Sweren, Melvin R., Baltimore  
 Wikberg, Vieno H., Dundalk  
 Zerwitz, Irving F., Baltimore  
 Zukerberg, Morris, Baltimore

#### SPECIAL STUDENTS

Buffington, James, Catonsville  
 Foster, Richard L., Baltimore  
 Foxman, Norma M., Baltimore  
 Gillis, Andrew C., Jr., Baltimore  
 Klaas, Emil J., Baltimore

Krivitsky, Nelson, Baltimore  
 Musher, Mildred, Baltimore  
 Plateau, Evelyn I., Baltimore  
 Sharp, Nathaniel, Woodlawn

### BALTIMORE THE SUMMER SCHOOL—1936

#### SCHOOL OF DENTISTRY

Aaron, Alvin, Biddeford, Me.  
 Barnes, Bradley B., Maplewood, N. J.  
 Barsamian, Samuel, Providence, R. I.  
 Bozzuto, John M., Jr., Waterbury, Conn.

Caldwell, Gilbert L., Baltimore  
 Carrigan, Harold J., Jersey City, N. J.  
 Cavallaro, Ralph C., Branford, Conn.  
 Centanni, Alfonse G., Newark, N. J.

Cohen, Jerome S., Baltimore  
 DuBoff, Leonard, Hartford, Conn.  
 Edgar, Benjamin D., Viola, Ill.  
 Edwards, Melvin F., Belford, N. J.  
 Erlich, William, Baltimore  
 Eskow, Alexander B., Perth Amboy, N. J.  
 Fallon, Charles H., Trenton, N. J.  
 Farrington, Charles C., Chelmsford, Mass.  
 Finkelstein, Louis B., Newark, N. J.  
 Gilden, Paul, Baltimore  
 Glick, George H., Passaic, N. J.  
 Griesbach, Hans H., Naugatuck, Conn.  
 Hampson, Robert E., Baltimore  
 Heil, Roland W., Baltimore  
 Hewitt, Earl C., Baltimore  
 Jakob, Robert, Norwalk, Conn.  
 Johnson, William B., Jr., Annapolis.  
 Joyce, Osler C., Arnold  
 Lawrence, Ronald, Elk Mills  
 Leonard, Melvin R., Chincoteague, Va.  
 Levin, David A., Baltimore

McClees, Joseph G., Baltimore  
 McCracken, Jules, Cameran, W. Va.  
 Melson, William F., Wilmington, Del.  
 Mendelsohn, Harry B., Norfolk, Va.  
 Miller, Robert G., Baltimore  
 Morris, Albert W., Salisbury  
 Nelson, Walter J., Providence, R. I.  
 Piccolo, James A., New Haven, Conn.  
 Reed, Robert A., Milford, Del.  
 Riffin, Harry E., Crisfield  
 Rogers, Everett T., Waterbury, Conn.  
 Schoepke, Oscar J., Oakfield, Wis.  
 Seyfert, Ernest G., Stratford, Conn.  
 Shea, Erwin E., Hartford, Conn.  
 Shobin, Jack, Baltimore  
 Smyth, Lawrence C., Quincy, Mass.  
 Storch, Murray, Passaic, N. J.  
 Turok, Seymour, Passaic, N. J.  
 Westerberg, Carl V., Simsbury, Conn.  
 Zea-Hernandez, Alvaro, Columbia, S. A.

#### SCHOOL OF MEDICINE

Aaron, James P., Jr., Baltimore  
 Baile, John R., New Windsor  
 Beck, Harry M., Baltimore  
 Bernstein, Aaron, Baltimore  
 Bernstein, Albion O., New York, N. Y.  
 Bess, Elizabeth G., Keyser, W. Va.  
 Blake, John A., Baltimore  
 Cianos, James N., Baltimore  
 Cohen, Frank S., Baltimore  
 Cowherd, William J., Long  
 Evans, Virginia J., Baltimore  
 Fink, Francis T., Baltimore  
 Fox, Samuel L., Baltimore  
 Fusting, William H., Baltimore  
 Gaver, Leo J., Myersville  
 Goldberg, Sylvan D., Baltimore  
 Grott, Harold A., Baltimore  
 Hartman, Oscar, Baltimore  
 Hartz, Alvin S., Baltimore  
 Hooker, Charles B., Baltimore  
 Hutchins, Thomas M., Bowens  
 Katz, Milton A., Westminster

Keister, Philip W., Lansdowne  
 Kleiman, Bernard S., Baltimore  
 Klinger, Mary E., Baltimore  
 Kump, Albert B., Bridgeton, N. J.  
 Kyle, Henry H., Waterbury  
 Lavenstein, Arnold F., Baltimore  
 Minor, Michael M., Kelayres, Penna.  
 Moran, John A., Conway, Mass.  
 Palmer, David W., Wheeling, W. Va.  
 Post, Laurence C., Buckhannon, W. Va.  
 Steger, William J., Wheeling, W. Va.  
 Tartikoff, George, Brooklyn, N. Y.  
 Twardowicz, Albin H., Baltimore  
 Urlock, John P., Baltimore  
 Wanner, Jesse R., Jr., Salisbury  
 White, Harry F., Jr., Baltimore  
 Whitworth, Fuller B., Westernport  
 Wilder, Milton J., Ferndale  
 Williams, Herman J., Reading, Penna.  
 Wilson, Harry T., Jr., Baltimore  
 Zalis, Daniel L., Baltimore

#### SCHOOL OF PHARMACY

Alessi, Alfred H., Baltimore  
 Allen, Benjamin F., Baltimore  
 Austin, Muriel F., Norwood, R. I.  
 Baker, Daniel S., Baltimore  
 Beam, Merlin A., Garrison  
 Blivess, Louis B., Baltimore  
 Brodsky, Alexander E., Baltimore  
 Dawson, Leroy O., Baltimore  
 Dobropolski, Anthony J., Baltimore  
 Floyd, Melvin L., Catonsville

Francik, Joseph, Baltimore  
 Freedman, Leonard, Baltimore  
 Fribush, Sidney, Baltimore  
 Friedman, Marion, Baltimore  
 Galley, Roland P., Baltimore  
 Gillis, Andrew C., Jr., Baltimore  
 Ginsberg, Samuel H., Baltimore  
 Gitomer, Norman M., Baltimore  
 Golditch, Henry M., Baltimore  
 Grove, Donald C., Baltimore



Gruz, Nathan I., Baltimore  
 Gregorek, Frank J., Baltimore  
 Gude, William D., Baltimore  
 Hackett, Angela R., Baltimore  
 Hamburger, Morton L., Baltimore  
 Heneson, Irving J., Baltimore  
 Hopkins, Carville B., Annapolis  
 Hopkins, John T., Annapolis  
 Hunt, William H., Baltimore  
 Kardash, Theodore, Baltimore  
 Karpa, Jerome J., Baltimore  
 Katz, Emanuel O., Baltimore  
 Kellough, Elmer R., Jr., Cumberland  
 Kosakowski, Chester G., Baltimore  
 Kovitz, Armand, Baltimore  
 Laken, Benjamin B., Baltimore  
 Leise, Joshua M., Baltimore  
 Loftus, Howard E., Dundalk  
 Matelis, Olga P., Baltimore  
 Mayer, Alexander M., Baltimore  
 Mendelsohn, Daniel, Relay  
 Miedusiewski, Francis J., Baltimore

Miller, Manuel, Baltimore  
 Morgenstern, Emma L., Woodlawn  
 Morgenstern, William A., Woodlawn  
 Muehlhause, Ruth V., Baltimore  
 Odell, James E., Catonsville  
 Okrasinski, Joseph L., Baltimore  
 Parker, Katherine J., Baltimore  
 Purdum, Frank L., Baltimore  
 Rice, Robb V., Baltimore  
 Richman, Jacob L., Baltimore  
 Rosenberg, Morris, Baltimore  
 Rosenfeld, Israel A., Baltimore  
 Rosenstein, Louis N., Baltimore  
 Sachs, Albert, Baltimore  
 Sama, Mario A., Baltimore  
 Schwartz, Harry, Baltimore  
 Seechuk, William W., Baltimore  
 Silverstein, Bernard, Ferndale  
 Vadala, Clarence E., Baltimore  
 Walb, Winfield A., Baltimore  
 Waxman, Milton M., Baltimore  
 Young, George I., Jr., Catonsville

### COLLEGE PARK THE SUMMER SCHOOL—1936

Aaronson, Philip J., Baltimore  
 Abell, Louise B., St. Inigoes  
 Abell, W. Lydia, Beachville  
 Adam, George D., Washington, D. C.  
 Adams, Hazel, Oldtown  
 Alderton, Loretta P., College Park  
 Aldridge, William A., Baltimore  
 Allamong-Struckman, Hannah M., Cumberland  
 Allen, John J., Hagerstown  
 \*Allen, Rowannetta S., Anacostia, D. C.  
 Alter, Irving D., Baltimore  
 Anders, Kathryn M., Westminster  
 Anderson, Eleanor F., Silver Spring  
 \*Anderson, Earl J., Roy, Washington  
 Anderson, G. Jeannette, Baltimore  
 Anderson, Janet T., Cumberland  
 \*Andrews, Myrtle, Crapo  
 \*Angel, Bonnie L., Swiss, N. C.  
 Appler, Helen I., Washington, D. C.  
 \*Arnold, Edward J., Woodlawn P. O.  
 Athearn, Robert H., Richmond, Va.  
 Athey, Thomas B., Severna Park  
 \*Aud, Kathleen L., Rockville  
 Auerbach, Laurence W., Brooklyn, N. Y.  
 Ayers, Alice J., Barton  
 Babka, Margaret, Edgewood  
 Baden, Elizabeth L., Baden  
 Baevsky, William D., Penns Grove, N. J.  
 Bain, Betty B., Washington, D. C.

\*Graduate Students

\*Baker, Harry, Jr., Washington, D. C.  
 Baker, Herbert W., Edgemont  
 Baker, Robert E., Washington, D. C.  
 \*Baker, Virginia, Mt. Rainier  
 \*Baldwin, Willis H., Havre de Grace  
 Balmer, Charles B., Lyndhurst, N. J.  
 Banks, Elizabeth B., Rockville  
 Barber, Pauline R., Charlotte Hall  
 Bargteil, Ralph, Baltimore  
 \*Barnes, Edwin H., Elkton  
 Barnsley, Jean, Rockville  
 Barnsley, Lucy H., Rockville  
 \*Bartlett, Helen R., Centerville  
 Batch, Francis E., Hyattsville  
 Baxley, J. W., Ellicott City  
 \*Baxter, Lois, Chestertown  
 Baxter, William T., Washington, D. C.  
 Beal, Anne A., Washington, D. C.  
 \*Beall, Ada, Libertytown  
 \*Beall, Beulah M., Upper Marlboro  
 Beall, Evelyn E., Fullerton  
 Beals, Jane H., Washington, D. C.  
 Bebb, Edward K., Chevy Chase  
 Becraft, Mabel V., Washington Grove  
 Bell, John W., Riverdale  
 Belt, Kenneth G., Washington, D. C.  
 Benjamin, Louis, Baltimore  
 Benner, Elisabeth, Baltimore  
 Bennett, Joseph H., Washington, D. C.  
 Bennett, Lucille K., Hyattsville

Bennett, Richard G., Cambridge  
 Benson, Brian M., Baltimore  
 Benson, Ritchie Elizabeth, Hyattstown  
 Berger, Lola W., Mechanicsville  
 Bernstein, Norman, Washington, D. C.  
 Bessemer, Mabel S., Washington, D. C.  
 Bick, George H., New Orleans, La.  
 \*Biehl, Katharine L., Frederick  
 Biggs, G. Marie, Jessup  
 Bilbrough, Catherine R., Greensboro  
 Bird, Jane deL., Sandy Spring  
 Bird, Walter M., Washington, D. C.  
 Birkland, John V., Washington, D. C.  
 Bittering, Charles, Washington, D. C.  
 Blacklock, Josiah A., Towson  
 Blentlinger, Charles L., Frederick  
 Blentlinger, Nellie E., Frederick  
 Blevins, Velma F., Sharon  
 Bloom, Joe Y., Paterson, N. J.  
 Bonner, Anna B., East New Market  
 Bonnett, Howard G., Washington, D. C.  
 Boswell, Alice A., Brookeville  
 Bowen, Henrietta D., Snow Hill  
 Bowie, Oden, Mitchellville  
 Bowser, Katherine R., Williamsport  
 Boyle, John B., Baltimore  
 Bradford, Ruth V., Washington, D. C.  
 Bradley, Jeanette, Hyattsville  
 Bradley, W. Brooks, Baltimore  
 Brady, Eugenia J., Brunswick  
 \*Brain, Earl F., Frostburg  
 \*Brandenburg, Annie L., Lisbon  
 \*Bratt, Hazel M., Oxford  
 Breaden, Richard C., Berwyn  
 \*Bready, Helen P., Washington, D. C.  
 Brehany, Kathleen C., Cumberland  
 Bricker, Kathryn M., Washington, D. C.  
 Brightwell, Ralph E., Lisbon  
 Brinsfield, Elizabeth, Reids Grove  
 Brinsfield, Mary V., Reids Grove  
 \*Bristow, Rosa L., Chevy Chase  
 \*Broadus, John P., Mt. Rainier  
 Broadbent, Janet S., Chevy Chase  
 Brockman, Ethel L., Riverdale  
 Brode, Carl K., Frostburg  
 Broderick, Esther M., Lonaconing  
 Brokamp, Ray W., Glen Burnie  
 Brooks, Elsie M., Poolesville  
 Brotman, Alfred, Baltimore  
 Brown, Alice E., Deal's Island  
 Brown, Elizabeth DeB., Washington, D. C.  
 \*Brown, George C., Asheville, N. C.  
 \*Brown, Lillian E., Chestertown  
 \*Brown, Marshall G., Oakland  
 \*Bruehl, John T., Jr., Centerville

\*Graduate Students

Brunson, Alice K., Florence, S. C.  
 Brusowankin, Bessie, Baltimore  
 Buck, Marjorie M., Indian Head  
 Buckel, Ralph L., Bittering  
 Buckingham, William O., Washington, D. C.  
 Bullen, Nellie R., Annapolis  
 Bullock, Carolyn M., New Windsor  
 Bullough, G. Van Ness, Baltimore  
 Burdette, Eunice E., Laurel  
 \*Burdette, Maxwell E., Damascus  
 \*Burgess, Lionel, Ellicott City  
 \*Burke, Edmund T., Silver Spring  
 Burroughs, Henryetta B., Mechanicsville  
 Burroughs, Nellie W., Mechanicsville  
 \*Burslem, William A., Hyattsville  
 Burtner, Rosemary J., Boonsboro  
 Burton, Beulah M., Washington, D. C.  
 Burton, Julia, Washington, D. C.  
 Bushell, Ruth T., Deals Island  
 Byer, Henry L., Sparrows Point  
 Byers, George E., Lonaconing  
 Byers, John, Lonaconing  
 \*Byrer, Virginia, Martinsburg, W. Va.  
 Caldwell, Katherine, Chevy Chase  
 \*Callis, Marvin G., Accident  
 Callis, Mason W., Accident  
 Campbell, Marjorie H., Washington, D. C.  
 \*Canada, Mary E., Lynchburg, Va.  
 Cantwell, Hammond D., Cambridge  
 Caplan, Raphael, Miller Station  
 Caples, Ruth C., Towson  
 \*Carney, John J., Westernport  
 Carpenter, Virginia P., Washington, D. C.  
 \*Carr, C. Jelleff, Baltimore  
 \*Carroll, Benjamin S., Easton  
 Carter, Mary E., Marion Station  
 \*Cavanaugh, John J., Cumberland  
 Celia, Mildred R., Severn  
 Chambers, Alsie P., Seabrook  
 \*Chandler, Harold H., Grayton  
 Chapman, M. Josephine, Cumberland  
 Chappelle, James A., Washington, D. C.  
 Cherrix, Ethel G., Snow Hill  
 Chrisler, Willard L., Washington, D. C.  
 Christie, Mary E., Washington, D. C.  
 Cissell, Beatrice S., West Friendship  
 Claffin, Alison R., Chevy Chase  
 Claney, Dorothy, Clark's Summit, Pa.  
 Clapp, Helen, Chevy Chase  
 Clark, Ellen N., Silver Spring  
 Clark, Frank, Washington, D. C.  
 Clarke, Edward M., Sabillasville  
 Clarke, Mary J., Hyattsville  
 Clayton, Louella M., Mt. Rainier



Cleaver, William F., Washington, D. C.  
 Close, Horace W., Washington, D. C.  
 Cochran, A. Mildred, Takoma Park  
 Coffay, May M., Baltimore  
 Coffey, Lillian S., Landover  
 Coffin, Mamie C., Berlin  
 Cohen, Maxwell, Washington, D. C.  
 Cohen, Sidney, Baltimore  
 Coleman, Alvin E., Jr., Chestertown  
 Coleman, Harry C., Jr., Chestertown  
 Coleman, Pauline, Sudlersville  
 \*Colip, Louise R., Riverdale  
 \*Collins, Julia E., Brazil, Ind.  
 Collison, Malcolm N., Takoma Park  
 Combs, Maxine, Fairmont, W. Va.  
 Comer, Florence R., Hyattsville  
 Connery, Edward F., Washington, D. C.  
 Conrad, Maude E., Williamsport  
 Cooke, Alfred A., Hyattsville  
 Copes, Bessie E., Silver Spring  
 Cornell, Barbara E., Silver Spring  
 \*Cornell, Florence N., Chevy Chase  
 Corridon, Jack R., Washington, D. C.  
 Cotton, Cornelia M., Beltsville  
 Coulbourne, Alice M., Crisfield  
 \*Covington, Evabelle S., Winston-Salem, N. C.  
 Cowie, Jean A., Perry Point  
 Craig, Evelyn M., Elk Mills  
 Craig, Madie E., Brentwood  
 Crampton, William G., Washington, D. C.  
 Crapster, Portia H., Woodbine  
 Creamer, Robert M., Baltimore  
 Cressman, Kathryn, Boonsboro  
 Cromer, Horace E., Jr., Washington, D. C.  
 Cronin, Frank H., Joppa  
 Cronise, A. Katherine, Frederick  
 Cropper, Florence D., Charlotte Hall  
 \*Cross, Chester B., Washington, D. C.  
 Cross, Janie A., Brandywine  
 Cullen, Russell H., Hyattsville  
 \*Cummings, Cleo, Kensington  
 Cutler, Dorothy M., Silver Spring  
 Cutting, Maude, Washington, D. C.  
 Dalinsky, Isador J., Baltimore  
 Danforth, Shirley F., Riverdale  
 Daugherty, Irvin W., Williamsport  
 \*Davis, Edward F., Cherrydale, Va.  
 Davis, Elsie H., Woodbine  
 \*Davis, Frank R., Jarrettsville  
 \*Davis, Gertrude J., Frostburg  
 Davis, Margaret E., Mt. Rainier  
 \*Davis, Winifred J., Frostburg  
 DeArney, Frank T., Windber, Pa.  
 Delaney, Catharine A., Frostburg  
 \*Delaney, Mary E., Ormond Beach, Fla.

\*Graduate Students

Dennis, Annie M., Pittsville  
 Dennis, Margaret A., Ocean City  
 Densmore, Gwendolyn, Frostburg  
 DeNunzio, Alfred J., Washington, D. C.  
 Deskin, Mark, Riverdale  
 DeVolt, Harold M., College Park  
 DeWilde, Jennie D., Preston  
 Dick, Virginia M., Salisbury  
 Dickey, Mary, Brenham, Texas  
 \*Diermier, Natalie S., Friendship Station, D. C.  
 Dieudonne, Erasmus L., Jr., Bladensburg  
 \*Diggs, Ruth E., Catonsville  
 Dillon, Mary C., Washington, D. C.  
 Dodd, Ocie, Chevy Chase, D. C.  
 Donahoo, Harry C., Chester, Pa.  
 Donohue, Mildred D., Baltimore  
 Dorsey, Agatha V., Midland  
 Dorsey, E. Elizabeth, Sykesville  
 Dotterer, Jacklyn S., Chevy Chase  
 \*Douglass, Edgar M., Silver Spring  
 Dowden, Elisabeth E., Washington, D. C.  
 Downin, John E., Baltimore  
 Downing, Anna E., Riverdale  
 Downs, Glendora M., Williamsport  
 Downton, Lydia M., Cumberland  
 \*Doyle, Catherine M., Washington, D. C.  
 Drescher, Edward, Hackensack, N. J.  
 \*Drisco, Marian, Hartford, Conn.  
 Dryer, Hilda Y., Washington, D. C.  
 \*DuBose, Clyde H., Pocomoke City  
 Dudley, Catherine, Eckhart Mines  
 \*Duley, Emily T., College Park  
 Duley, Oscar R., Croome Station  
 Dunwoody, Ruth M., Baltimore  
 Durboraw, Agnes L., Hagerstown  
 Durham, Lucille R., Forest Hill  
 Durner, Viola H., Severn  
 Durr, Edwena, Cumberland  
 DuShane, Doris A., Baltimore  
 \*Duvall, Maude R., Rockville  
 \*Duvall, Wilbur I., Gaithersburg  
 Dyche, Mildred I., Cumberland  
 Dyott, Hazel S., Easton  
 Eaton, William R., Chester  
 Eck, Clarence A., Raspeburg  
 Edelen, Mary B., Bryantown  
 Edgeton, Catherine A., Washington, D. C.  
 \*Edgeworth, Clyde B., Towson  
 Edmonds, William R., Baltimore  
 Edmundson, Doris L., College Park  
 Edson, Peggie M., Washington, D. C.  
 Egan, John J., Waterbury, Conn.  
 Ekas, Alice A., Baltimore  
 Ellegood, Georgia G., Delmar  
 Ellis, Bernice A., Washington, D. C.

Elmore, Edna E., Washington, D. C.  
 Emmons, Elizabeth S., Suitland  
 \*Endslow, Joseph S., Street  
 \*Engel, Lea K., Washington, D. C.  
 Epstein, Edwin, Centreville  
 Ernest, Lois E., Kensington  
 Evans, Dorothy E., Takoma Park  
 Evans, Frank D., Chevy Chase  
 Everett, Estella, Bel Air  
 Everhart, Helen H., Frederick  
 \*Faber, J. E., College Park  
 Farrell, Hugh G., Metuchen, N. J.  
 Farwell, Florence, Takoma Park  
 \*Fearnow, Genevieve A., Laytonsville  
 Feddeman, Edna S., Millington  
 Felton, Charles W., Washington, D. C.  
 \*Fenton, Louise E., Washington, D. C.  
 Fiery, Ruth C., Hagerstown  
 Filer, Grace E., Frostburg  
 Fischer, Isadore, Washington, D. C.  
 Fisher, Charles B., Thomas  
 Fisher, Joseph R., Baltimore  
 Fitzgerald, Charlotte, Princess Anne  
 Fitzwater, John L., Oakland  
 Fleek, Elsie M., Anacostia, D. C.  
 Fleming, Harold E., Savage  
 Fletcher, Mildred J., Washington, D. C.  
 Fletcher, Oscar R., Sanford, Va.  
 Flook, Howard O., Myersville  
 \*Foley, Julia C., Rockville  
 Footen, Paul L., Barton  
 \*Forshee, Edith D., Washington, D. C.  
 Forsythe, Augusta, Silver Spring  
 Fosbroke, Gerald E., Elkridge  
 \*Fox, Eston F., Hagerstown  
 \*Franklin, Mary T., Hyattsville  
 Frantz, Merle D., Friendsville  
 Franzoni, Joseph D., Washington, D. C.  
 Fricker, Blanche, Washington, D. C.  
 \*Friedman, David, Silver Spring  
 \*Friedman, Harold B., Silver Spring  
 Friedman, Jack, Washington, D. C.  
 \*Frisbie, Kenneth W., Bethesda  
 Fuerst, Robert G., Hyattsville  
 Fulgham, Evel W., Washington, D. C.  
 Fulmer, Edna M., Frederick  
 \*Funk, A. Louise, Hagerstown  
 Fuss, Lucille A., Hagerstown  
 Gaczynski, Eugenia T., Jersey City, N. J.  
 Gall, Ralph G., Thurmont  
 Galloway, Rhea M., Lonaconing  
 Gannon, Catherine A., Cordova  
 Gardner, Emma A., Washington, D. C.  
 Garman, Helen A., Washington, D. C.  
 \*Garner, Veta B., Washington, D. C.  
 Gastley, Mary C., Frederick

\*Graduate Students

Gengnagel, Rosella B., Catonsville  
 George, Claire C., Washington, D. C.  
 Gerstein, Lillian, Washington, D. C.  
 Gessford, Richard L., Mt. Rainier  
 Gibson, Eloise, Huntingtown  
 Gibson, Rachel F., Glen Burnie  
 Gilbert, Marjorie W., Cambridge  
 Gilbertson, Kenneth G., Bladensburg  
 Gillespie, Fannie R., Pocomoke  
 \*Gillespie, Warren Galena  
 Gilmore, Garnette I., Williamson, W. Va.  
 Glime, Gilbert, Frostburg  
 Goforth, Alys, Riverdale  
 Goldberg, Alvin, Brooklyn, N. Y.  
 Golden, Lex B., Washington, D. C.  
 Goodman, J. H., Frederick  
 Goodpasture, Esther M., Washington, D. C.  
 \*Gordon, Fortuna L., Baltimore  
 Gordon, Myrtle, Washington, D. C.  
 Gordon, Thomas W., Baltimore  
 Gorsuch, M. Jeannette R., New Windsor  
 Gough, Hazel O., Gaithersburg  
 Graff, Marie C., Washington, D. C.  
 \*Graham, James G., Washington, D. C.  
 \*Graham, Julian R., Sudlersville  
 \*Graham, William C., Deal's Island  
 Granbery, Helen L., Washington, D. C.  
 \*Gray, Ellen H., Reisterstown  
 \*Gray, Florence A., Port Tobacco  
 Green, Edgar L., Jr., Catonsville  
 \*Green, Mary O., Boyds  
 Green, Ruth E., Hyattsville  
 Greenfield, Arthur, Yonkers, N. Y.  
 Greer, Margaret A., Bel Air  
 \*Gregory, Florence I., Washington, D. C.  
 \*Griffith, Francis D., Brandy, Va.  
 Grimes, Maye E., Woodbine  
 Grindle, Rhea, Cumberland  
 Gross, Eleanor K., White Hall  
 \*Grove, Donald C., Baltimore  
 \*Grove, Edith M., Chevy Chase, D. C.  
 Gutschmidt, Nathan, North Bergen, N. J.  
 Guy, Eleanor A., Westernport  
 \*Gwynn, Thomas S., Jr., Clinton  
 Hale, Nola G., Annapolis  
 Hall, Eleanor, Fairmont, W. Va.  
 \*Hall, Richard W., Monie  
 Hall, Thomas W., Bel Air  
 Hamblin, Gertrude, Pittsville  
 \*Hamilton, Evelyn E., Limestone, Me.  
 Hand, George E., Washington, D. C.  
 \*Hanna, Mary, Westernport  
 \*Hannon, Loretto, Frostburg  
 Hanson, Mary E., Frostburg  
 Hanson, Ruth, Frostburg



Harcum, Bettie, Salisbury  
 \*Hardell, Elmer P., Washington, D. C.  
 Hardell, Nellie G., Washington, D. C.  
 Hardesty, Lillian M., West River  
 Harris, Joseph M., Washington, D. C.  
 Harshman, Edith L., Chewsville  
 \*Hart, William J., Madison, Wis.  
 \*Hartenstein, Helena, New Freedom, Pa.  
 Haspert, M. J., Chester  
 Hasty, Rufus B., Appalachia, Va.  
 \*Haszard, Frank K., Hyattsville  
 \*Hauke, Edna E., Rockville  
 \*Hauver, Edgar R., Street  
 Hawley, Walter O., Takoma Park  
 Hayden, Agnes, Pope's Creek  
 \*Hayes, Edward E., Royersford, Pa.  
 Headley, Marylois, Canton, Ohio  
 Hearne, M. Elizabeth, Pittsville  
 Heiss, John W., Washington, D. C.  
 Helfgott, Jack L., Mitchellville  
 Hellweg, Vincent P., Washington, D. C.  
 Henault, Gladys M., Upper Marlboro  
 Henderson, Freda M., Monkton  
 Hendley, Pearl, Frostburg  
 Henley, Robert C., Washington, D. C.  
 Henneberger, Lawrence B., Boonsboro  
 Henry, Nellie W., Delmar  
 Hepbron, Ida L., Betterton  
 Heringman, Leo, Baltimore  
 \*Hersperger, Louise, Poolesville  
 \*Hesse, Claron O., Los Angeles, Calif.  
 Hiatt, Pearl M., Brentwood  
 Hickman, Leonora D., Parsons, W. Va.  
 Hickman, Mildred M., Crisfield  
 Hicks, Minnie E., Chestertown  
 Higgins, Homer S., Cumberland  
 \*Higgins, Virginia C., Washington, D. C.  
 Hill, Florence R., Laurel  
 Hill, Pauline R., Woodlawn  
 Hirsch, Albert, Frederick  
 Hite, Norborne A., Port Deposit  
 \*Hitz, Chester W., Fortescue, Mo.  
 Hoagland, Mary A., Washington, D. C.  
 Hoagland, Philip L., Washington, D. C.  
 Hobbs, Genevieve L., Laurel  
 Hobbs, Lewis F., Silver Spring  
 Hobbs, Marguerite W., Washington, D. C.  
 Hobson, Barbara E., Washington, D. C.  
 Hoenes, Sophia W., Baltimore  
 Holbrook, Helen P., College Park  
 \*Hollis, Edgar H., Frederick  
 Hollister, Curtis L., Washington, D. C.  
 \*Holmead, Frances S., Silver Spring  
 Holmes, Forrest S., Jr., College Park  
 Holt, Mary E., Washington, D. C.  
 \*Holter, D. Vernon, Thurmont

\*Graduate Students

Hooton, Kittie M., Hyattsville  
 Hoover, Lawrence G., Takoma Park  
 \*Hopkins, Eugene J., Cumberland  
 Hopkins, Grace R., Easton  
 Horne, John F., Chevy Chase  
 Horne, Sally J., Easton  
 Horner, Mary E., Princess Anne  
 \*Horton, Sara, Miami, Fla.  
 Hosken, Margaret R., Accokeek  
 Howard, Addie J., Hyattsville  
 Howard, Adrienne, Hyattsville  
 Howard, Dorothy L., Rockville  
 \*Howard, Frank L., Hyattsville  
 \*Howard, M. Louise, Dayton  
 Howes, Grace B., Rockville  
 Hoyt, Rachel E., Easton  
 \*Huffington, Paul E., Trappe  
 Hughes, Fred J., Chevy Chase  
 Hughes, Robert L., Jr., Aberdeen  
 Hughes, Virginia, Easton  
 Hunt, Richard M., Washington, D. C.  
 \*Hunt, William H., Baltimore  
 Hutton, Joel W., College Park  
 Hyde, Jennie M., Barton  
 Hyslop, Charles D., Silver Spring  
 Iager, Helen L., Hyattsville  
 Inskeep, Hazel, Barton  
 Insley, F. Maurille, Cambridge  
 Ireland, Veturia W., McKendrie  
 Jack, Katie L., Frostburg  
 \*Jackson, Martha A., Grenada, Miss.  
 \*Jackson, Thomas A., Grenada, Miss.  
 Jacob, John E., Baltimore  
 Jacobs, John S., Washington, D. C.  
 Jacques, Lancelot, Jr., Smithsburg  
 Jameson, Beatrice, Hill Top  
 Jarboe, Maude M., Mechanicsville  
 Jeffers, Betty C., Washington, D. C.  
 Jefferson, E. Marguerite, Salisbury  
 Jenkins, Margaret R., Williamsport  
 \*Jenkins, Stanleigh E., Hyattsville  
 \*Jewell, Edgar G., Damascus  
 Jimmyer, John K., Baltimore  
 Johnson, Jerome H., Washington, D. C.  
 Johnson, Margaret C., Pocomoke City  
 \*Johnson, Mary W., Burlington, N. C.  
 Johnston, Tayloe F., Mechanicsville  
 Jones, Dorothy D., Pittsville  
 Jones, Emma L., Madison  
 Jones, Helen J., Silver Spring  
 \*Jones, Margaret, Frostburg  
 Jones, Marguerite E., Owings Mills  
 Jones, Mary E., Loveville  
 \*Jones, Oscar B., Shenandoah Junction, W. Va.  
 \*Jones, Robert W., Frostburg

\*Jones, Wilbur A., Laurel  
 Jones, William P., Wingate  
 Jordan, Francis X., Washington, D. C.  
 Kalb, Merrill B., Baltimore  
 Kalbaugh, Virginia, Luke  
 Kalis, Samuel D., Baltimore  
 Kane, Eleanor B., Washington, D. C.  
 Karpa, Lillian, Baltimore  
 Keefer, Ruth T., Takoma Park  
 Keenan, Frances J., Madison  
 Keller, Joseph E., Washington, D. C.  
 Kellermann, Eileen A., Hyattsville  
 Kelley, Mary M., Wye Mills  
 Kelly, John T., Towson  
 Kelly, Nellie P., Ocean City  
 Kelly, Viola H., Lonaconing  
 Kennon, W. Stanley, Washington, D. C.  
 \*Kephart, Charlotte B., Washington, D. C.  
 Kephart, Jane F., Takoma Park  
 Keppler, Millicent M., Washington, D. C.  
 Keppler, William J., Washington, D. C.  
 Kerby, Olive P., Benning, D. C.  
 Kexel, Evelyn, Hampstead  
 Kiernan-Vasa, Helen, Washington, D. C.  
 \*Kimble, Dorothy, Port Deposit  
 \*King, Frances L., Frederick  
 King, Laura G., Annapolis Junction  
 \*King, Ora H., Clarksburg  
 King, Thomas O., Savage  
 Kinna, C. Robert, Chewsville  
 Kinnamon, Myrtle V., Cordova  
 Kinney, Robert W., Washington, D. C.  
 Kirby, Marion, Takoma Park  
 Kline, Margaret M., Cumberland  
 \*Klinger, Mary E., Baltimore  
 Klompus, Katie, Cumberland  
 Kluckhuhn, Frederick H., Laurel  
 \*Knight, T. H. Owen, Silver Spring  
 Knotts, Dorothy E., Templeville  
 \*Knox, Clarence M., Finksburg  
 \*Kookan, Nellie R., Westernport  
 Korab, Arnold A., Brentwood  
 \*Krausse, Harry W., Baltimore  
 Kreuzburg, Harvey W., Silver Spring  
 Kuhlman, Gus R., Harrisburg, Pa.  
 \*Kuhnle, Mary Evelyn, Westernport  
 Kunes, Geraldine L., Cumberland  
 Kunes, Nina E., Cumberland  
 Ladson, Jack A., Olney  
 \*Lake, Virginia S., Washington, D. C.  
 \*LaMar, Austin A., Jr., Sandy Spring  
 \*Lanahan, Doris, Laurel  
 \*Lane, Marian, Washington, D. C.  
 \*Lane, Ruth B., Washington, D. C.  
 Lang, Rachel M., Stockton  
 Langford, Ruby, Blythewood, S. C.

\*Graduate Students

Langley, Theodore C., Washington, D. C.  
 Langschmidt, Edward G., Relay  
 \*Lanham, William B., Jr., Silver Spring  
 Lankford, Melvin C., Baltimore  
 Latterner, Henry, Chevy Chase  
 Lauxmann, Elizabeth A., Washington, D. C.  
 Lavine, Isidor M., Mt. Rainier  
 \*Lawler, Sydney T., Olney  
 Laws, Lucile W., Silver Spring  
 Lee, Whiting B., Hyattsville  
 Leech, Dorothy E., Washington, D. C.  
 LeFrak, Samuel J., Brooklyn, N. Y.  
 Lehnert, Phyllis, Washington, D. C.  
 Lehr, Emily C., Bethesda  
 \*Lehr, H. Franklin, Bethesda  
 Lemmon, Bessie B., Washington, D. C.  
 Leshner, Margaret R., Hagerstown  
 \*Leshner, Robert F., Hagerstown  
 Levine, Beatrice L., Washington, D. C.  
 Lewald, James H., Laurel  
 Lewis, Clestelle M., Washington, D. C.  
 Lewis, Frank H., Frederick  
 \*Lewis, Mabel E., Wilmington, N. C.  
 Liberato, Venancio Q., Riverdale  
 \*Liebman, Rebekah, Norfolk, Va.  
 Liggett, Carrie E., Washington, D. C.  
 Linthicum, Parepa F., Washington, D. C.  
 Lisann, Tessie S., Washington, D. C.  
 Liskey, Robert B., Hagerstown  
 \*Littleford, Robert A., Washington, D. C.  
 Livingstone, Nannie D., Cumberland  
 Loar, Margaret T., Rawlings  
 Lockhart, Julia, Milledgeville, Ga.  
 Long, Edwin D., Westover  
 \*Longley, Edward L., Baltimore  
 Lovell, Mary H., Brentwood  
 \*Love, Solomon, Washington, D. C.  
 Loveless, Mary G., Upper Marlboro  
 \*Lowe, Cletus D., Shepherdstown, W. Va.  
 \*Lucas, Philip E., Arlington, Va.  
 Lundell, Ernst D., Chevy Chase  
 Lyddane, Alice M., Takoma Park  
 Lynch, Elizabeth S., Washington, D. C.  
 \*Lyon, Marie H., Hyattsville  
 \*MacBride, John B., Dundalk  
 Maccubbin, Mary F., Laurel  
 MacDonald, Margaret E., Bethesda  
 Madory, Helen E., Steubenville, Ohio  
 Magaha, E. Adeline, Frederick  
 Maguire, John N., Wilmington, Del.  
 Malone, Louise McC., Silver Spring  
 Manakee, Edward Y., Baltimore  
 Mangum, Susie A., Washington, D. C.  
 \*Manley, John F., Frostburg  
 Manley, Margaret R., Midland

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Mann, Arthur W., Washington, D. C.  
 Marchant, Ruth E., Laurel  
 \*Marshall, Earla B., Hyattsville  
 Marshall, Gwendolyn A., Princess Anne  
 Martin, Alice R., Hyattsville  
 Martin, Carrie P., Baltimore  
 Martin, Grace W., Washington, D. C.  
 Martinez, Josefina, Baltimore  
 \*Mason, Clarence W., Easton  
 \*Mason, Elwood B., Berlin  
 Matson, Ruby I., Takoma Park  
 Matthews, Abigail G., La Plata  
 Mattingly, Carolyn W., Mechanicsville  
 Maxson, Ruth H., Silver Spring  
 Maxwell, Geneva, Washington, D. C.  
 Mayerberg, Willson L., Dover, Del.  
 McCaffrey, Richard H., Baltimore  
 McCall, Mildred L., Washington, D. C.  
 McCann, P. Harold, Glen Burnie  
 McCauley, Eloise C., Bennings, D. C.  
 McCauley, Irma, Washington, D. C.  
 McCausland, M. L. (Mrs.), Washington, D. C.  
 \*McClung, Frank, Rockville  
 McCormack, Elizabeth H., Lonaconing  
 McCurdy, Philip C., Kensington  
 McFadden, Duncan B., Washington, D. C.  
 McGinnis, Verneena, Pomonkey  
 McGoury, Thomas E., Odenton  
 McIntire, John N., Oakland  
 McIntyre, M. Elizabeth, Cumberland  
 McLeod, Katie L., Latta, S. C.  
 McMahan, Elizabeth, Cambridge  
 McMillan, Margaret A., Chevy Chase  
 McNaughton, Edwina B., Takoma Park  
 McPherson, Dorothy M., Takoma  
 McPherson, Jessie F., Washington, D. C.  
 \*McRae, Ruth H., Washington, D. C.  
 McWilliams, William J., Indian Head  
 \*Meacham, Frank B., Raleigh, N. C.  
 Mead, Joan, Takoma Park  
 \*Measell, Ira D., Upper Marlboro  
 Meenehan, M. Frank, Washington, D. C.  
 Mehl, Joseph M., Washington, D. C.  
 Meinzer, Roy C., Washington, D. C.  
 Melchoir, Audrey S., Edgewood  
 Merritt, Eliza C., Towson  
 \*Messina, Julius, Baltimore  
 \*Metcalf, Howard E., Takoma Park  
 Michael, Charles, Ferndale  
 Middleton, Edward L., Wayside  
 \*Middleton, Frederic A., Washington, D. C.  
 Mileto, Catherine, Annapolis  
 Miller, A. LaVerne, Leonardtown  
 \*Miller, Anne, Spencerville  
 \*Miller, Lula A., Bridgewater, Va.  
 \*Miller, Marion E., Easton  
 Miller, Nettie M., Unionville  
 Miller, William I., Baltimore  
 \*Mills, James B., Delmar, Del.  
 Mills, Mabel D., Salisbury  
 Minnick, Grace E., Washington, D. C.  
 Misiek, Eleanor M., Washington, D. C.  
 \*Misiek, William, Washington, D. C.  
 Mitchell, Mary E., Jessups  
 \*Mizell, George M., Big Pool  
 Molofsky, Bernice, Baltimore  
 Monred, Ravenell A., Gaithersburg  
 Montgomery, Eva M., Barton  
 Montgomery, Mary S., College Park  
 Moore, Edith S., Washington, D. C.  
 Moore, Evelyn V., East New Market  
 Moore, Helen, Frostburg  
 Moore, Margaret, Washington, D. C.  
 Moore, Robert R., Sandy Spring  
 Moran, Joseph T., Westernport  
 \*Morgan, Claudine, Lonaconing  
 \*Morgan, Esthelene W., Chevy Chase  
 Morris, Winfield S., Lonaconing  
 Morton, Helen C., Silesia  
 \*Moser, F. Irene, Washington, D. C.  
 Mudd, H. Virginia, Pomfret  
 Mullendore, Louise C., Washington, D. C.  
 \*Mullinix, Helen E., Damascus  
 Muncks, John D., Baltimore  
 \*Murphy, Harry T., Ellicott City  
 Murray, William P., Princess Anne  
 \*Myers, Alfred T., Riverdale  
 \*Nagel, Chester S., Hooversville, Pa.  
 Nalley, Mary E., Washington, D. C.  
 \*Nash, Carroll B., College Park  
 \*Nathanson, Albert, Alexandria, Va.  
 Nattans, Ralph A., Baltimore  
 Needle, Barnett M., Washington, D. C.  
 \*Neely, Helen F., Brookeville  
 Neilson, Julia M., Baltimore  
 Neilson, Robert S., Jr., Baltimore  
 Nelson, Margaret L., Crisfield  
 \*Newcomer, Joe C., Brunswick  
 \*Nicholls, Gertrude E., Boyds  
 Nichols, Dorothy V., Chevy Chase  
 Nicht, Anna M., Frostburg  
 Nides, Fedon G., Centreville  
 \*Nides, Nicholas G., Centreville  
 Niswanger, Estella L., Washington, D. C.  
 Noble, Amber Y., Los Angeles, Calif.  
 Nolan, Edna P., Mt. Rainier  
 Nolte, William A., Washington, D. C.  
 Nordwall, Nellie, Princess Anne  
 Nowell, Margaret L., Shady Side  
 \*Nutter, Eva P., Rising Sun

\*Graduate Students

Oliver, Elmer R., Washington, D. C.  
 Ortenzio, Louis, College Park  
 Oursler, Griffith S., Clinton  
 Owen, Robert F., Washington, D. C.  
 Owens, Doris, Hanover  
 Owens, James D., Linthicum Heights  
 Pagan, Katharine, Washington, D. C.  
 Page, John G., Baltimore  
 Palmer, E. Rebecca, Harrisburg, Pa.  
 \*Parent, Paul A., Washington, D. C.  
 Parker, Marian D., Pittsville  
 Parker, Mollie L., Salisbury  
 \*Parker, Vera, Brentwood  
 Parsons, Charles R., Washington, D. C.  
 \*Parsons, Henry O., Laramie, Wyo.  
 Pages, William A., Chevy Chase  
 Patterson, Evelyn W., Washington, D. C.  
 \*Paulette, Edward W., Arlington, Va.  
 Peck, Alvin B., Washington, D. C.  
 Pepper, Paul R., Washington, D. C.  
 Pennington, Helen D., Easton  
 \*Pergler, Carl, Chevy Chase  
 Perlstein, Sam, Washington, D. C.  
 Peter, Clarice, Silver Spring  
 \*Peterman, Walter W., Clear Spring  
 Petrides, George A., Washington, D. C.  
 Phillips, Adon W., Bethesda  
 Phillips, Esther V., Silver Spring  
 Phillips, Irving, Washington, D. C.  
 \*Phillips, Watson D., Elkton  
 Phillips, Wilbur M., Hagerstown  
 \*Phipps, William R., Easton  
 Piozet, Dolores A., Hyattsville  
 Piozet, Nina C., Hyattsville  
 Platt, Doran S., Jr., Washington, D. C.  
 Plowden, Edna L., New Port  
 \*Poole, Harry R., Williamsport  
 Potter, Charlotte P., Emmerton, Va.  
 Prichard, Helen M., Frostburg  
 Probey, Frances V., Washington, D. C.  
 Pruitt, Charles E., Frederick  
 Pruitt, Dorothy M., Berlin  
 Pryor, Glen M., Lantz  
 Pugatch, Melvyn T., Baltimore  
 Pumphrey, Elizabeth S., Upper Marlboro  
 Pyles, Dorothy C., Cheltenham  
 Queen, Helen H., Waldorf  
 Quillen, William P., Bishop  
 \*Quinn, Edward F., Jr., Washington, D. C.  
 Rabbitt, Alton E., College Heights  
 Ramey, Arthur G., Cumberland  
 Ramsburg, Helen B., Beltsville  
 Reed, Ira L., Laurel  
 Reed, Octavia E., Washington, D. C.  
 Reid, Florence, Silver Spring  
 Reidy, Kathryn L., Chevy Chase  
 Resnitsky, Isabel, Jersey City, N. J.  
 Reynolds, Brooks E., Georgetown, Del.  
 \*Rhodes, Harry C., Poolesville  
 \*Rhodes, Louis K., Jr., Queenstown  
 \*Rice, Robb V., Missoula, Mont.  
 Richardson, Vaughn E., Willards  
 Richmond, Marion, Washington, D. C.  
 Richter, Christian F., Overlea  
 Ricketts, Lulu B., Brookeville  
 Ridgely, Phyllis C., Washington, D. C.  
 \*Riedel, Erna N., Gambrills  
 Rigglesman, Jessie, Frostburg  
 Riggs, Katharine L., Derwood  
 Rigler, Hazel, Mt. Airy  
 Riley, Helen M., Omaha, Neb.  
 \*Riley, Mary B., Hyattsville  
 Roberts, Ruby E., Salisbury  
 Roberts, Ethel J., Hughesville  
 \*Robertson, Roy L., Elkton  
 \*Robey, Carrie E., Laurel  
 Robinson, Charles H., Cardiff  
 Robinson, Sara A., Cambridge  
 Roby, Ethelbert S., Kenbridge, Va.  
 Rockkind, Joseph M., Baltimore  
 Rock, Dorothy A., Dundalk  
 \*Rooney, Catherine M., Washington, D. C.  
 Root, Ellis P., Annapolis  
 Rosen, Janet A., Long Island, N. Y.  
 Rosin, Anne, Silver Spring  
 \*Roth, Alfred C., Jr., Annapolis  
 Roundy, Paul V., Jr., Chevy Chase  
 \*Runyan, Elva, Hill, Va.  
 Rush, Louise R., Benning Station, D. C.  
 Rymer, Joan W., Hyattsville  
 Sadowsky, Ann S., North East  
 Sahlin, Emilie H., Annapolis  
 Samson, Catherine M., Takoma Park  
 \*Santini, Antoinette, Burtonsville  
 Scates, Irene A., Gaithersburg  
 Schaefer, Edna M., Frederick  
 Schaeffer, Carol J., Washington, D. C.  
 Schaufele, Walter J., Fullerton  
 Scheele, Thomas J., Washington, D. C.  
 Schiff, Adelaide S., Allentown, Pa.  
 Schneider, Abraham L., Glenn Dale  
 Schneider, Howard, Yonkers, N. Y.  
 Schneider, William R., Ellicott City  
 \*Schollenberger, George S., Laurel, Del.  
 Schott, Dorothy S., Rockville  
 \*Schott, Loren F., Rockville  
 Schumacher, Sally, Washington, D. C.  
 Schwartz, Mortimer, New York, N. Y.  
 Schweitz, Edwin P., Washington, D. C.  
 Scully, Walter D., Washington, D. C.  
 Sensenbaugh, Glenn H., Smithsburg  
 \*Sessions, Ruth W., Takoma Park

\*Graduate Students



Sesso, Raymond F., Washington, D. C.  
 \*Severance, Katheryne, Gaithersburg  
 \*Sharitz, Rupert O., Washington, D. C.  
 \*Shaw, Ann B., College Park  
 Shaw, Edward L., Chevy Chase  
 Shearer, Kathleen M., Hyattsville  
 Shearer, Ross W., Hyattsville  
 Shears, Kathleen, Clinton  
 Shenk, Virginia, Hagerstown  
 Shepherd, Ashby L., Jr., Bristol  
 Shepperd, Anna G., Upper Falls  
 Shepperd, Mary F., Upper Falls  
 \*Sherwood, Winifred, Washington, D. C.  
 Shipley, Amy E., Harman  
 Shipley, Cora Lee, Branchville  
 Shives, Lena M., Big Pool  
 Shmuner, Anne, Baltimore  
 Shockley, Mary R., Pittsville  
 Shoemaker, Edna L., Cumberland  
 Shoemaker, Goldie G., Bethesda  
 Shuck, Rose C., Frostburg.  
 \*Shumaker, Warren Ed., Cumberland  
 \*Sibley, Martha, Milledgeville, Ga.  
 \*Sieling, Frederick W., Annapolis Junction  
 Silberg, I. Walter, Baltimore  
 Silver, Hazel M., Washington, D. C.  
 Silverman, Frank, Baltimore  
 Sines, Winona W., College Park  
 \*Sixbey, George L., Mayville, N. Y.  
 Skelley, Mary F., Oldtown  
 Skinner, Calvin L., Sudlersville  
 Skinner, Doris E., Port Republic  
 \*Skinner, Geneva K., Takoma Park  
 Sleeman, Mary V., Frostburg  
 Sleeman, Ursula C., Frostburg  
 Sloan, Margaret H., Lonaconing  
 Slocomb, Lena L., Easton  
 \*Slocum, Emerson P., Cambridge  
 Slote, Herbert W., Brooklyn, N. Y.  
 \*Small, Florence F., Hyattsville  
 Smith, Ada R., Cecilton  
 Smith, Arietta, Salisbury  
 Smith, Belle J., Salisbury  
 Smith, Eleanor L., Rockville  
 Smith, Ellen L., Upper Marlboro  
 Smith, F. Edward, Jr., Baltimore  
 \*Smith, F. Elizabeth, Rockville  
 Smith, Francis DeS., Vale Summit  
 \*Smith, Helen I., Takoma Park  
 Smith, Hilda H., Hebron  
 Smith, John T., Rockville  
 \*Smith, Margret W., Hyattsville  
 Smith, Marian, Washington, D. C.  
 \*Smith, Mary E. M., Frederick  
 Smith, Robert E., Fishing Creek  
 Smith, Ruth E., Frederick  
 Snodgrass, Annie L., Norton, Va.

\*Graduate Students

Snook, Kathryn A., Buckeystown  
 Snouffer, Mary S., College Park  
 Snow, Mary R., Chevy Chase  
 Snyder, Charles H., Clear Spring  
 Snyder, Robert L., Baltimore  
 Snyder, Ruth I., College Park  
 \*Soper, Agnes P., Washington, D. C.  
 Soper, Kathryn E., Clarksburg  
 Soper, Ruby E., Washington, D. C.  
 Souder, Letty, Gaithersburg  
 Soule, Floyd A., Washington, D. C.  
 \*Sowers, Lowell M., Lonaconing  
 Spencer, Mary H., Baltimore  
 \*Spencer, Raymond R., Baltimore  
 \*Spoerlein, Ernest C., Oakland  
 Springer, Pauline, Westernport  
 Spruill, William T., Brandywine  
 Stakem, Veronica C., Midland  
 Stanley, Gertrude W., Mt. Airy  
 \*Stanton, William A., Hyattsville  
 Steiwer, Frederick, Washington, D. C.  
 Stevens, Evelyn M., Laurel  
 Stevens, Grace, Washington, D. C.  
 Stevens, Margaret T., Sudlersville  
 Stewart, Caroline L., Glenn Dale  
 Stiles, Edith L., Rockville  
 \*Stimpson, Edwin G., College Park  
 \*Stinnett, Lucille L., Brentwood  
 Stitely, Helen E., Union Bridge  
 Stone, Elizabeth Y., Ferndale  
 Stone, John T., Ferndale  
 \*Stone, Margaret G., White Plains  
 Stoops, E. Jonelle, Frostburg  
 Storm, Mildred R., Baltimore  
 Stotler, Irma D., Hagerstown  
 Stratmann, Marie H., Sparrows Point  
 Strite, Marguerite L., Clearspring  
 \*Sullivan, Helen P., Laurel  
 Sullivan, Ross H., Pleasantville, N. J.  
 Sutherland, Jessie R., St. Joseph, Mo.  
 Swann, Melvin, Easton  
 Sween, Lorna, Frostburg  
 \*Symon, Eva L., Hyattsville  
 Symon, Gladys C., Hyattsville  
 Talone, Edward R., Brentwood  
 Tarbett, Clara M., Takoma Park  
 Tarbutton, Ethel A., Easton  
 Tate, Mary B., Washington, D. C.  
 \*Taylor, Alice E., Perryville  
 Taylor, Harriett E., Washington, D. C.  
 \*Taylor, Letha E., Centreville  
 Taylor, Mary W., Washington, D. C.  
 Taylor, Sarah E., Conowingo  
 \*Temple, Alva D., Brandywine, W. Va.  
 Tennant, Anne W., Cumberland  
 Tennant, Eleanor P., Eckhart  
 Terbush, Theron L., Washington, D. C.

Ternent, Effie, Lonaconing  
 \*Terwilliger, William B., Baltimore  
 \*Teter, Sarah K., Bridgeport, W. Va.  
 \*Thom, Myrtle A., Washington, D. C.  
 Thomas, Nellie G., Oldtown  
 Thompson, Florence G., Cumberland  
 Thorne, Clayton T., Silver Spring  
 Thornton, Eugene J., Worten  
 Thorpe, Esther D., Bel Air  
 Tilghman, Charles E., Salisbury  
 \*Tillett, B. D., College Park  
 Tillett, Elizabeth, College Park  
 Todd, Wyona L., Wingate  
 Tomlinson, Mary V., North East  
 Tompkins, Margaret H., Rockville  
 Townshend, Helen H., Baden  
 Towson, Helen J., Washington, D. C.  
 Towson, William O., Baltimore  
 Traband, Adelaide, Upper Marlboro  
 Tucker, Idabelle, Annapolis  
 Tull, Miles T., Marion  
 Turner, Edward C., La Plata  
 Turner, Emily B., Aquasco  
 \*Twilley, Otis S., Salisbury  
 Tyler, Roberta L., Crisfield  
 Tyner, Ellamay, Washington, D. C.  
 Updike, Edna M., Washington, Va.  
 Valle, Joseph, Baltimore  
 Vandegrift, Mary C., Cumberland  
 Vandervoort, Susan H., Middletown, Pa.  
 \*VanMetre, Albert R., Pasadena  
 Vansant, Lillian A., Catonsville  
 Vasa, Vladimir, Washington, D. C.  
 Vaughan, Eleanor J., Washington, D. C.  
 Vaught, Valerie V., Riverdale  
 Venemann, Virginia L., Riverdale  
 Vernon, Joseph B., Alderson, W. Va.  
 \*Vogt, Margaretta M., Chevy Chase  
 Vogtman, Harry R., Cumberland  
 Vogts, Leila, Aberdeen  
 Wachtel, Ellen L., Myersville  
 Waddey, Mary H., Princess Anne  
 \*Wade, Margaret E., Port Tobacco  
 Waesche, Charlotte S., Mitchellville  
 Waite, Malden D., Odenton  
 Waldon, Mildred E., Washington, D. C.  
 \*Walker, Earnest A., Hyattsville  
 Walsh, Ambrose J., Jr., Brentwood  
 \*Ward, James R., Gaithersburg  
 Warehime, Vallie B., Manchester  
 Warfield, Harriett H., Bishopville  
 \*Warren, Warren, Rising Sun  
 \*Waskow, Henry B., Baltimore  
 Waters, Albert G., Washington, D. C.  
 Watkins, Dayton O., Hyattsville  
 \*Watkins, Grace O., Hyattsville  
 \*Watkins, Robert S., Jessups

\*Graduate Students

\*Watkins, Wilma L., Washington Grove  
 Watson, Stanley B., Brandywine  
 Wayble, Margaret A., Brunswick  
 \*Weagly, Robert H., Laurel  
 Webb, Albert W., Vienna  
 Webb, Margaret O., Hyattsville  
 Weber, June E., Washington, D. C.  
 Weidemann, Janet S., Washington, D. C.  
 Weigle, Edgar F., Mt. Airy  
 Weis, Helen L., Baltimore  
 \*Weis, Theofield G., Takoma Park  
 Weiser, Theodore T., Brooklyn, N. Y.  
 Wells, Gertrude H., Gaithersburg  
 Wells, Joan K. M., Washington, D. C.  
 West, Dorothy H., Kensington  
 West, Vernon E., Jr., Chevy Chase  
 \*Weyman, Leo A., Washington, D. C.  
 Wheatley, Rosemary, Hyattsville  
 Wheatley, Victoria K., Vienna  
 Wheedleton, Adeline, Seaford, Del.  
 Whipple, Stanley R., Baltimore  
 White, James W., Germantown  
 White, Robert B., Salisbury  
 \*Whiteford, Henry S., Baltimore  
 Whitt, Marie B., Washington, D. C.  
 Wiederlight, Seymour, Brooklyn, N. Y.  
 Wilcox, Annette T., Washington, D. C.  
 Wilken, Ruth R., Washington, D. C.  
 Wilkinson, Eileen E., Gaithersburg  
 Wilkinson, Helen V., Silver Spring  
 \*Wilkinson, Mabel B., Washington, D. C.  
 Willard, Helen, Poolesville  
 Willey, Edward J., Washington, D. C.  
 Williams, Dorothy E., College Park  
 Williams, Edith M., Washington, D. C.  
 Williams, James P., Pittsburgh, Pa.  
 Williams, L. Leighton, Washington, D. C.  
 Williamson, Helen B., Washington, D. C.  
 Willingham, Patricia M., Hyattsville  
 Willson, Gertrude B., Washington, D. C.  
 \*Wilson, C. Merrick, Poolesville  
 Wilson, Rosalie, Birmingham, Ala.  
 \*Wilson, Virginia B., Pittsville  
 \*Wilson, Walter S., Highland  
 Windsor, Susie, Venton  
 Wine, Hilda K., Washington, D. C.  
 \*Wingate, Phillip J., Wingate  
 Wink, Treva B., Manchester  
 Wise, Elizabeth F., Middletown  
 Witman, Horace W., Rising Sun  
 Witt, Emmitt C., Washington, D. C.  
 \*Wolfe, John K., Washington, D. C.  
 Woll, Ephraim, Washington, D. C.  
 Wolverton, Clara A., Baltimore  
 \*Wondrack, Arthur J., Washington, D. C.  
 \*Wood, Bessie T., Silver Spring  
 Wood, Helen L., Washington, D. C.



Woodell, John H., Baltimore  
 \*Woolley, Neil O., West Leyden, N. Y.  
 Worsley, Gertrude C., Silver Spring  
 Wright, Robert K., Frederick  
 Wyand, William J., Sharpsburg  
 \*Yearsley, Margaret E., Washington, D. C.  
 \*Yonkers, Bernard O., Emmitsburg  
 Young, Alma C., Prince Frederick  
 Young, Edmond G., Baltimore

\*Graduate students

Young, Jerome L., Washington, D. C.  
 Zalesak, Francis J., College Park  
 \*Zapponi, Paschal P., Wooster, Ohio  
 Zebelean, John, Catonsville  
 Zihlman, Frederick A., Washington, D. C.  
 Zimmerman, Marian A., Washington, D. C.  
 Zulick, C. M., Houtzdale, Pa.

## SUMMARY OF STUDENT ENROLLMENT

AS OF JUNE 1, 1937

### RESIDENT COLLEGIATE COURSES—ACADEMIC YEAR

	College Park	Baltimore	Total
College of Agriculture.....	252	.....	252
College of Arts and Sciences.....	998	.....	998
School of Dentistry.....	.....	271	271
College of Education.....	357	.....	357
College of Engineering.....	307	.....	307
Graduate School.....	337	.....	337
College of Home Economics.....	159	.....	159
School of Law.....	.....	224	224
School of Medicine.....	.....	406	406
School of Nursing.....	.....	126	126
School of Pharmacy.....	.....	248	248
Total .....	2,410	1,275	3,685
SUMMER SCHOOL, 1936.....	1,077	156	1,233
EXTENSION COURSES:			
Collegiate Credit:			
Annapolis (Arts and Sciences).....	28	.....	28
Baltimore (Industrial Education).....	220	.....	220
Cambridge (Arts and Sciences).....	28	.....	28
Subcollegiate:			
Mining (Engineering) .....	178	.....	178
Grand total .....	3,941	1,431	5,372
Duplications .....	377	121	538
Net total .....	3,564	1,310	4,834

Enrollment in Short Courses and Conferences of from two days to one week: Rural Women, 717; Boys' and Girls' Club, 440; Volunteer Firemen, 136; Highway Engineers, 127; Operators of Water Works and Sewage Disposal Plants, 54; Canning Crops Conference, 134; Florists, 262; Nurserymen, 55; Garden School, 188. Parent Teacher Conference, 75; CCC Conference, 152.



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